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ABSTRACT

Intended to help economics educators in grades K-12 foster in students the thinking skills and substantive economic knowledge necessary to become effective and participating citizens, this book is organized around four themes. Part I presents an introduction by Mark C. Schug and a section on "The Current Status of Economics in the K-12 Curriculum" (William Walstad and Michael Watts). Next, Leon Schur summarizes the key concepts and principles that are fundamental and most appropriate in the K-12 curriculum. In Part II, Mark C. Schug and Beverly Jeanne Armento discuss research on how children think about economic ideas as a basis for numerous teaching activities for elementary children. Ronald A. Banaszak then notes the importance of economic understanding for early adolescents and presents appropriate learning activities. Similarly, Judith Brenneke and John C. Soper discuss the role of economics education at the high school, offering specific teaching suggestions. In Part III, Robert B. Woyach challenges teachers with a rationale for global education and offers practical teaching suggestions that introduce young people to the interdependence of our economy and the global economic system. Then Steven Haessler and Mark C. Schug identify practical ways to enhance citizenship knowledge and skills by studying the economy and the local community. In the final section, Margaret A. Laughlin introduces numerous resources to help improve economic understanding of both teachers and students. (LH)

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Mark C. Schug
Editor

Published by
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Foreword

The Joint Council on Economic Education is pleased to serve with the National Education Association as copublisher of *Economics in the School Curriculum, K–12*.

The contributors to this publication represent the high caliber of work for which the Joint Council and its affiliates have gained a national reputation in economic education among teachers. They combine expertise in economic content with skill and experience in methods of presenting economics to students at every grade level.

Consistent with the philosophy of the Joint Council, the authors identify clearly the research findings upon which their recommendations are based. Most of the authors provide classroom-tested strategies for teaching economics to students, and they use techniques that are appropriate to students' developmental levels. In addition, they suggest teaching materials produced by the Joint Council and other sources that help to enhance the instructional power of teachers.

This volume will be most helpful to professional economics educators, both as a survey of some of the best thinking on the subject, and as a ready text for students interested in the subject. School curriculum personnel and classroom teachers will also find the book a helpful guide. We commend this combined effort of the NEA and the Joint Council to the attention of these and all other interested educators.

Michael A. MacDowell
President
Joint Council on Economic Education

1. Introduction

by Mark C. Schug

Economic education means different things to different people. To some, it means knowing how to make smart investments in the stock market. To others, it means knowing how to get a good buy at the supermarket or what to look for when buying a new car. Still others believe economics is a set of mysterious theories that are often contradictory and meaningless to the average citizen.

The position of this publication differs from each of these views. It holds that economic education introduces young people to a highly useful way of thinking about basic issues and making personal and social decisions. An understanding and application of fundamental economic concepts and principles helps them in this decision-making process. The goal of economic education, then, is to foster in students the thinking skills and substantive economic knowledge necessary to become effective and participating citizens. Indeed, the welfare and improvement of our economic system—and ultimately of the Republic itself—require such an informed citizenry.

Each of the authors represented here strives for a balance between theory and practice to help teachers begin or expand their efforts to improve young people's economic understanding. Four basic themes organize this book. First, there is a forthright look at the current position of economic education in the K-12 curriculum. William Walstad and Michael Watts have accepted this challenge. They present a balanced and realistic view of economic education in the schools today, focusing on teacher preparation, the relationship of economics to the general curriculum, strengths and weaknesses of student economic learning, and suggestions for moving ahead.

Second, there is a need to inform teachers about what economics is and what it is not. Leon Schur summarizes the key concepts and principles to help educators understand the ideas that are fundamental and most appropriate for economic education in the K-12 curriculum.

Third, this book emphasizes the idea that no one area of the curriculum has a monopoly on teaching economic ideas. To highlight the importance of economic education in the general

curriculum, there are special chapters on several areas of the school program. Beverly Jeanne Armento and I discuss research we have conducted on how children think about economic ideas and use this as a base to suggest numerous teaching activities for elementary children. Ronald A. Banaszak notes the importance of economic understanding for early adolescents, developing and applying appropriate learning activities that have been used successfully in the classroom. Similarly, Judith Brenneke and John C. Soper discuss the role of economic education at the high school level, offering specific teaching suggestions. Two other chapters recognize innovative approaches for economic education. Robert B. Woyach challenges teachers with a rationale for global education. He includes practical teaching suggestions that introduce young people to the interdependence of our economy and the global economic system. This chapter is of key importance because of the tendency to overemphasize our economy and the failure to view economic events from a global perspective. Then Steven Haessler and I identify practical ways to enhance citizenship knowledge and skills by studying the economy of the local community.

Fourth, many teachers may say to themselves, "Okay, we buy economic education but where can we get more direct assistance?" As Margaret A. Laughlin points out, there is no need for teachers to feel neglected in these efforts. She introduces numerous resources to help improve the economic understanding of both teachers and students, with information on their availability. In addition, she gives several practical suggestions for using the resources of more than two dozen organizations.

The members of the Advisory Panel have also made an important contribution to this publication. Their comments and suggestions have been very helpful. Most of these have been incorporated into the text. Two suggestions were not followed, however. Because the focus of the book is on economics in the curriculum, there is no discussion of investment options; and because prices of materials and publications change, no price information appears in Chapter 9.

Of course, the goal of improving economic education will take more than the publication of one book such as this. Nonetheless, it is our hope that classroom teachers will find many useful suggestions in the following pages and will begin to take the steps necessary to move closer to the goal of an economically literate and involved citizenry.

2. The Current Status of Economics in the K–12 Curriculum

by William Walstad and Michael Watts

INTRODUCTION

Economic events have dominated the news since the 1970s. The OPEC oil price shocks in 1973–74 and again in 1979 caused severe problems for the U.S. economy as the nation responded to the increased cost of this essential energy resource. In addition, the nation experienced a period of rapid inflation with consumer prices doubling in the eight-year period from 1973 to 1981. Recessions occurred in 1974 and in 1979–81 with unemployment rates rising over 10 percent in the latter period. Economic problems also became the subject of major political debates, with controversies over tax and government spending cuts, high interest rates, and the size of the federal deficit.

Undoubtedly the increasing importance of economic issues at the national and international levels contributed to a renewed emphasis on economics instruction in the nation's elementary and secondary schools during this time.

Teachers responded to many demands for a better understanding of the changing economic world. Administrators and community leaders often stressed the need for classroom discussion of local, state, and national economic decisions to prepare students for effective citizenship. Business interests argued that high school graduates should understand the workings of the economic system and appreciate the role of business in society. Parents asked the schools to teach their children how to handle family finances and to plan career choices in a competitive economy, where bad choices can mean high costs. These and other voices combined to stimulate more economics instruction at the secondary level through separate courses or by integrating economics within such subjects as consumer education, general business, or U.S. history. Materials were also developed to demonstrate how easily economics can be integrated into the elementary curriculum.

This renewed interest should be good news to teachers and administrators who are concerned with economic education in the schools. Economics is now recognized as an important, "basic" subject that is worth teaching in both the secondary and elementary schools. Key concepts and understandings from the discipline have been identified for teachers and a wealth of instructional materials have been created to teach basic economics in all grades. In all states, many opportunities are available for teachers to learn more about the subject and related curriculum issues in courses, conferences, and workshops. (For sources of teaching materials and opportunities for professional development, see Chapter 9.) Furthermore, research shows that teachers who spend time upgrading their economic knowledge and teaching skills make a greater contribution to students' economic understanding and attitudes. In addition, school districts that build comprehensive economics curricula provide the foundation for cumulative increases in students' knowledge of the subject. Finally, a national network of state councils and university centers exists to support teachers and school districts in their efforts to improve instruction in economics.

On the other hand, not all the news is good. Economic education continues to face significant, interrelated problems in the training of teachers, the structure of the curriculum, and the use of instructional materials. Based on the number of college courses taken, the economics background of most teachers is usually inadequate. In addition, teachers are interested only in short workshops, which are of limited value in improving knowledge. Elementary teachers feel unable to teach the subject because of time constraints, and this perceived barrier suggests that even the best economic education materials will be underused. At the secondary level, economics reaches few students in separate courses, and it is doubtful whether poorly trained teachers can integrate the subject into other courses. New instructional materials may help the situation, but not unless teachers understand basic economics, see the need to teach it in their classes, and receive good administrative support.

TEACHER TRAINING IN ECONOMICS

It is widely recognized that the teacher is the key to what is taught in the classroom. According to a recent report on social studies instruction, "The teacher's beliefs about schooling, his or her knowledge of the subject area and of available materials and

techniques, how he or she decides to put these together for the classroom—out of that process of reflection and personal inclination comes the day-by-day classroom experiences of students" (12, p. 5).* Knowledge of subject matter and methods of teaching it are essential to effective instruction in the social studies and all subjects; however, the need for substantial teacher training is probably greatest in economics.

Two decades ago a California task force offered guidelines for teacher training in economics. It recommended two courses for all K-12 teachers, three courses for all grade 7-12 social studies teachers, and seven semester courses with a minor in economics for all twelfth grade teachers who wanted to teach a separate course in economics (8). Although these guidelines were viewed as a *minimum* standard, they were never widely adopted even in reduced form by teacher training institutions across the nation. The reasons for this inaction are obvious. Economics is one among many subjects competing for more space as a required course in the pre-service social studies, business education, home economics, or industrial arts curriculum. Moreover, the perceived difficulty of economics makes it less attractive than other social science courses as an elective for education majors.

This situation partly explains the limited economics training of many teachers. In fact, the data reported in 12 statewide surveys on economic education (20) show about half the teachers at the elementary level with no course work and another 25 percent with only one course. The surveys of secondary social studies teachers or those who specialize in teaching courses or units in economics show about 10 to 20 percent with no course work, about 25 percent with one course, and about 30 percent with two courses. For the small percentage of teachers with more courses, little information is available on when they took the courses and no data are available on the quality of the courses. These factors are important given knowledge depreciation and changes in economic analysis and issues in recent years. Not too surprisingly, then, a large number of surveyed teachers, with or without courses, report feeling a deficiency in their training in economics and a lack of confidence in their ability to teach the subject.

Nevertheless, the majority of teachers prefer short workshops over credit courses. In the *National Survey* of teachers who teach economics as a separate subject or who integrate it into other

*Numbers in parentheses appearing in the text refer to the chapter references.

subjects in grades 6-12, about 50 percent wanted "in-service seminars/workshops" in either economics (56 percent) or how to teach it (47 percent), whereas only about 25 percent were interested in summer or college graduate-credit courses in these areas (22, pp. 86-87). Whether much content or pedagogy can be learned in a short program is questionable, and the lasting effect of workshops is subject to further investigation. Another matter of concern is the large percentage (44 to 53) of teachers who show no interest in short workshops, much less courses.

The training situation does have a bright side, however. State and national survey data consistently show that most teachers who have participated in economic education programs (courses or workshops) rate them very positively. This means that professional economic educators and staff developers are probably doing a worthwhile job in conducting programs. A growing body of research suggests that in-service courses and teacher training have a direct and significant impact on students' economic understanding and attitudes (cf. 7, 16, 17, 18, 5, 6). Finding new incentives (monetary or otherwise) to attract and reward teachers for investing in economic education training may be one way that administrators and other professionals can contribute to improved student learning and attitudes.

INFUSING ECONOMICS INTO THE CURRICULUM

The dominant method of teaching economics in the United States is through integration or infusion. In the *National Survey* of "economics" teachers in grades 6-12, 47 percent reported teaching the subject as part of another course, most likely a social studies course such as U.S. history or government. Only 25 percent taught economics as a separate subject, while another 27 percent taught it both separately and as part of another subject (22, p. 49). How much economics is learned with this approach is still open to study, especially given the weak background in this subject of most teachers and some of the problems that follow.

Standard textbooks, for example, provide little help for teachers in the social studies, where most of the integration work is supposed to occur. One study that analyzed leading textbooks for U.S. history, world history, sociology, and government courses concluded that the publications contained misconceptions about the operation of the economic system and presented ad hoc explanations for economic phenomena (9). A more detailed study

of the treatment of the Great Depression showed inadequate economic analysis in most texts (10).

Teachers also complain about the limited availability of supplementary instructional materials for teaching economics. Although 69 percent of the teachers in the *National Survey* felt that more such materials were available than five years earlier, 40 percent claimed that fewer materials were available in economics than in most other subjects. Teachers also expressed reservations about the quality of the materials. Educators who claimed that economics materials were not as good as those in most other subjects outnumbered by 12 percentage points educators who felt they were better (29 versus 17 percent, with 49 percent rating the materials about the same) (22, pp. 69–71).

Without good instructional resources, scarce teacher time must be invested in preparing new materials to incorporate economics into various subjects. Teachers whose background in economics is weak may not have the skills to develop new materials or the motivation to integrate economics into an already crowded curriculum. However, prepackaged materials, such as *Trade-offs* or *Give and Take* (see Chapter 9), can be used to overcome such limitations. These materials can be effective vehicles for teaching economics, especially when teachers receive some training in their use (for example, see *Trade-offs* studies by Walstad, [18]; Chizmar and Halinski, [5]; Chizmar and McCarney [6]).

Nevertheless, these prepackaged strategies must receive widespread use to be successful, and curriculum penetration of even the best product may be slight. The *National Survey*, for example, reported the most frequently used material was the popular economic history film series *American Enterprise*, but only 12 percent of the teachers reported using it (22, p. 84). *Our Working World* was probably the most successful textbook series in economic education for elementary schools, but only 16 percent of the school districts claimed to use it prior to 1976, and 8 percent of the districts claimed to use it in 1976–77 (21, pp. 8–24). The use of any set of economic education materials in over 10 percent of the school districts is a major achievement; however, the best materials will never substitute for the key educational element—teachers.

Curriculum guides might be expected to help teachers identify important concepts to teach and their placement in the curriculum. However, a recent study of 43 curriculum guides produced in school districts with supposedly strong economic education programs revealed problems with the presentation of scope and

sequence. Armento concluded that "Concepts are dealt with at the introductory, definitional level—whether the guide is intended for the ninth or the twelfth grade. If this is the case, there must be an assumption by curriculum builders that prior instruction in economic education has not occurred" (1, p. 26). The low level of sophistication in presenting concepts and the fact that many guides do not include concepts (especially in macroeconomics) therefore raise doubts about instructional quality in these districts.

Instructional time for economics may also be insufficient in infusion courses. The national study of the social studies indicated that elementary teachers spend an average of 25 minutes a day on social studies subjects (21, p. 51). Secondary teachers probably spend about 40 minutes a day on such instruction. Assuming that discussion of economic topics occurs about one-fifth of the time, this means about 25 minutes a week in elementary schools and 40 minutes a week in secondary schools. Even though teachers might like to increase the class time for economics, they perceive time contraint as a major barrier, especially at the elementary level where the focus is on more traditional "basic" subjects.

The preceding problems should not be construed as a pessimistic assessment of the status of economic education in the K–12 curriculum. There is no doubt that economics *can* be infused into the courses and curricula as has been the case in a number of school districts. But the process requires continual teacher training, the development of good instructional materials, a well-articulated economics curriculum, and strong administrative and community support. The difficulty of the task should not be underestimated.

SEPARATE ECONOMICS COURSES

Teaching economics as a separate course appears to be a simpler, more direct approach than integration or infusion, although this alternative also has drawbacks. The definition of an economics course varies widely. Only 56 percent of separate subject teachers in the *National Survey* called their classes "economics." Over a fourth (27 percent) called their classes "consumer economic education," 13 percent referred to their classes as "free enterprise," while the remaining responses for course titles included U.S. history, civics, and sociology (22, p. 51). If course title is an indication of course content, then a portion of what passes for economics at the precollege level cannot be considered the "basic economics" that most economists would recognize.

When asked what type of economics instruction they stress in the classroom, 34 percent of these teachers reported teaching "practical" economics. Although no precise definition of this term is offered other than "knowledge that students need in their everyday lives," it suggests a focus on consumer economic topics and a descriptive treatment of issues. Only 16 percent of the teachers reported emphasizing theoretical or "basic" economics (that is, "principles, concepts, and systems") in their classes, while 47 percent of the classes stressed both theoretical and practical economics.

The number of students who are taking economics as a separate course is also difficult to determine. The estimated figures in the 1976–77 social studies report showed 682,532 secondary students enrolled in economics courses. During that school year, about 15.6 million secondary students were enrolled in grades 9–12, which suggests that economics is taken by only about 4 percent of secondary students in a particular year. This estimate is probably reasonable, given that economics courses account for only 5 percent of all social studies classes.

In addition, the opportunity to take a separate course in economics is not universal since it is offered in only 34 percent of all schools that include grades 10–12 (21, pp. 60, 54). The course would become more universal and would reach more students if it were required for graduation. This option is not currently a popular one. Eight states have a mandated course in economics or "free enterprise" and 15 other states with a mandate have adopted the infusion approach. The remaining states have no mandate and use guidelines or recommendations to encourage economics instruction (3).

WHAT STUDENTS ARE AND ARE NOT LEARNING

While few studies report which particular economic concepts students understand best, several trends are beginning to emerge. Teachers, administrators, and specialists developing new curriculum guides or materials would be well advised to place special emphasis on four broad areas.

First, data from a nationally normed test of economic understanding indicate that high school students typically are less prepared to answer questions on macroeconomic concepts and topics (for example, unemployment, inflation, GNP, and economic growth) than on microeconomic concepts and topics (for exam-

ple, supply and demand, productivity, profits, market structure) (13; 14, p. 11). Certainly macroeconomic concepts often involve a level of sophistication that makes it unreasonable to teach them at the elementary level, and perhaps even at the junior high school level. Consequently, high school students may have little prior exposure to macroeconomics. On the other hand, these concepts are more often discussed "in the news" and therefore more likely to be covered in a variety of secondary courses. In such classes, limited teacher training in economics and poor educational materials are probably contributing causes to inadequate instruction.

A second well-known weakness in students' economic understanding across elementary and secondary grade levels involves the fundamental concept of "real" or opportunity cost (22, pp. 23-24). Knowledge of this concept is essential to understanding the economic problem of scarcity, where choosing among alternatives implies foregoing some wants to satisfy others judged more important. Or, as economists never tire of saying, "There's no such thing as a free lunch," since the resources used to prepare the "free" lunch could have been used to satisfy other wants. Opportunity cost is not widely used or popularized other than in academic courses on economics, so more classroom teachers will need to learn and begin using this concept in the classroom before much progress can be noted on student test scores.

A third, older problem area is the rather broad topic of public policy. Both elementary and secondary students seem too likely to point to some visible public policy and its immediate results in explaining economic conditions that currently exist, or in suggesting answers to problems that students feel should be corrected. Students do not often appreciate the long-term, indirect results of government policies. The classic example, pointed out over 150 years ago by the Scottish economist Adam Smith, is the impact of import tariffs (or quotas). While these government actions help trade and employment in the protected industry, they come at the expense of trade and employment in exporting industries, and they support higher prices for the protected product. This limited outlook on policy questions, coupled with the failure to understand opportunity cost, means that students are in a poor position to evaluate the costs and benefits of public policies in general, and in particular those policies that involve costs and benefits that are not directly measured in dollar terms.

Finally, there is disturbing evidence that when students are exposed to economics instruction through a K-12 infusion pro-

gram, they do not acquire an overview of how individual concepts fit together into a meaningful whole. This situation is most apparent when students have not taken a capstone economics course. Several state surveys of teachers, for example, indicate that economic concepts are taught on a random basis, often by teachers who lack confidence in their ability to teach them, and that few teachers present the seven economic concepts necessary for students to understand the fundamental idea of a circular flow in the economic system (20, pp. 7–8). No teachers can "teach" answers to all the questions on current policy issues, but they can give students the analytical tools and basic concepts necessary to examine such questions. A sound statement on how to do this may be found in the recently revised *Master Curriculum Guide in Economics for the Nation's Schools* (11). This document should serve as the basic reference for in-service courses and workshops for elementary and secondary teachers, and it should be an invaluable guide for curriculum development.

STRATEGIES FOR ADMINISTRATORS AND TEACHERS

As discussed in this chapter, the major debate over how to improve the level of student economic literacy has recently focused on two conflicting and complementary approaches—infusion versus a mandated economics course. There is no published research on the comparative effectiveness of the two approaches. Infusion is naturally attractive to administrators who favor local autonomy in curriculum planning and who have limited budget resources for economic education; it requires skilled teachers with good educational materials and adequate time for instruction. This K–12 method has long been promoted by the Joint Council on Economic Education (JCEE) in its Developmental Economic Education Program (DEEP) for schools (15). The JCEE network specializes in providing necessary support services for infusion in the areas of teacher training, educational materials, and curriculum planning as part of this DEEP process. Several research studies also provide empirical evidence that DEEP improves students' economic understanding and attitudes (2, 14, 19, 4). The JCEE is currently working on a major expansion of the number of school districts participating in DEEP.

In contrast, the mandated course offers the promise that students will receive instruction in economics, or some variant such as "free enterprise" or consumer economics, for a substantial

period of time at a specified grade level. Teachers of separate economics courses tend to be better trained in the subject, and they usually have standard textbooks, syllabi, and supplementary materials to use. Mandating a course also means that more students are taught since economics has never been a popular elective among students. The effectiveness of a one-semester course—whether introductory or terminal—is a question that remains to be answered, however. The strategy would not be recommended for other basic subjects, such as reading, language arts, or mathematics, and it is doubtful whether a single course offers sufficient exposure to the complex subject of economics. A further risk of mandating a course is the temptation offered teachers in earlier grades and other subjects to assume that they may pass over economics instruction in their classroom because "students will cover that material later."

The infusion and mandated approaches are also complementary. In the best of all worlds, a carefully planned, implemented, and evaluated program to improve economic literacy would include both the K–12 integration approach *and* a capstone course in economics for all students. Infusing economics throughout the curriculum in various units, minicourses, and subjects would give students exposure to the basic economic concepts throughout their schooling, while the capstone course would organize the related learnings into a meaningful whole so that their economic knowledge could become a lasting tool for analyzing their personal and social decisions. Obviously this comprehensive strategy requires resources for staff development, systematic curriculum planning and coordination, and student evaluation that may stretch the resource base of most districts. Nevertheless, supplementary funding can often be found in the community. There are also numerous examples of school districts that have made major commitments to economic education with very limited resources. Essentially, administrators with curriculum responsibility must start and maintain the process in school districts, and ultimately determine whether the instruction will be piecemeal or systematic.

Individual teachers can also take an active role in improving economic education programs in their classes and schools. Key steps in this process would include (1) improving their knowledge of economics and ways to teach it through courses, in-service workshops, general reading, and classroom preparation; (2) searching for new curriculum materials and exploring new opportunities to incorporate economics into regular classroom instruc-

tion; (3) documenting economics teaching activities to share with other educators and/or submitting the materials to awards programs for innovative teaching; (4) building a support group for economic education among teachers and administrators; (5) involving qualified personnel from higher education, business, labor, and government in economic education activities and a school network; and (6) evaluating materials, speakers, and strategies used in the classroom to ensure that students hear opposing points of view on controversial economic topics.

CONCLUSION

To be effective, economic education in the K–12 curriculum demands hard work from professionals in many fields. Administrators and university educators must continue to support and press for the increased training of teachers, the production of innovative instructional projects, and the building of a comprehensive economics curriculum. More attention also should be devoted to finding incentives that will lead teachers to seek more education, and to developing instructional materials that are easier for classroom use. Teachers must master basic economic concepts and give more emphasis to classroom instruction in economics. Community leaders must provide more financial and in-kind support for economic education without tying the contribution to the promotion of special interests. Researchers must collect more reliable data on the status of economic education on a regular basis.

In the past few decades, the conditions for making economic education work were more clearly identified and were instituted in some school districts. Further advancement in the near future will require all parties to substantially expand their efforts to build a more systematic curricular program for economic education that most of the nation's school districts can implement.

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3. What Economics Is Worth Teaching?

by Leon Schur

INTRODUCTION

Before discussing specific economic principles, it might be best to begin with an explanation of what economics is—and what it is not. The discipline of economics consists of a methodology and a specific structure of concepts and principles. The methodology describes the process that economists follow in deriving the principles or generalizations that form the core ideas of the discipline. Basically, economics depends on the use of the scientific method for deriving these principles. One crucially important aspect of this method is the attempt to separate the principles from value judgments. The principles set forth "what is" in the economic arena, not what "should be." Liberal and conservative economists may agree completely, for example, on the principle that an increase in budgetary deficits will increase prices and still disagree on what should be done about government spending and taxation. Conservatives may argue that deficits can be cut back by decreasing spending in order to reduce the role of government. Liberals, on the other hand, may contend that taxes should be increased in order to reduce deficits while maintaining a level of government spending that will enable the nation to achieve desired social goals. This is a simple case of two groups of economists differing completely on the issue of whether or not taxes should be raised while agreeing on the basic economic principle involved in making the decision.

The study of economics, then, should not be thought of as learning which policy is best or which economic alternative should be adopted. Rather, it is important to realize that economics relies on fundamental principles that are necessary to discover the consequences of alternative courses of action, which in turn enable individuals to implement their value judgments more intelligently. This chapter sets forth fundamental concepts and principles of economics to help teachers improve instruction in economics and

to help students learn how to better achieve their personal and civic goals.

Economics is defined as the discipline that deals with the allocation of limited resources among unlimited wants. In fact, the basic concept of *scarcity* is defined in those terms. A scarce good is one for which you must pay a price; its opposite is a free good. Examples of free goods are air, water, and sunshine. But even these goods may not be "free" if they include dirty air and water. In other words, clean air and water can also be scarce resources. Scarcity, then, can apply to almost everything. Wealthy individuals and nations as well as poor ones face this problem.

The problem of scarcity suggests the need for making choices. Since all wants cannot be satisfied, decisions must be made about which goods should be produced with the limited resources available. To deal with the problem of choice, economists use *the law of opportunity costs*—which holds that the resources used to produce a particular good or service cannot be used to produce something else. Thus, if you purchase a sweater, the resources that were used to produce it are not available to produce a shirt that you may also want. At the national level, a country cannot have both guns and butter. If it wishes to produce more tanks, it must give up the use of resources to alleviate poverty.

Given the need for making choices and the law of opportunity costs, individuals must organize their society to help them make these decisions. The way they choose to organize economic life is called an economic system. Three basic economic systems are usually identified—traditional, command, and market. A traditional system is probably best typified by the European feudal system of the Middle Ages, although elements of such a system still survive in all countries, particularly in the less developed countries of Africa and Asia. A pure traditional economy answers the important economic questions by looking at the way earlier generations answered these questions. A command system is one in which the basic economic questions are answered by resort to authority or command—whether a dictator, a government bureau, or an elected legislative body. Centrally planned countries such as the Soviet Union or the People's Republic of China are examples of planned economies. A market economy is characterized by decentralized decision making in which the basic decisions are made by individuals registering their decisions in markets as consumers, producers, and workers. The United States and the Western democracies are examples of market economic systems.

Of course, in the real world a pure economic system is rare if it exists at all. Most economies are mixed in the sense that they contain elements of market, command, and traditional systems.

In the United States, consumer decisions to purchase certain goods and services in the market determine in large measure the question of what goods to produce. However, state, local, and federal governments spend over one-third of our total output, and consumers voting at the ballot box, not in the marketplace, make the decisions to purchase weapons or public education. In addition, the U.S. economy still has some elements of tradition—for example, women entering certain occupations because of cultural influence or states setting maximum interest rates on home mortgages because of the tradition against usury. Consequently, although the United States has a predominantly market economy, it has large elements of command or government and some elements of a traditional system. Similarly, while other countries may have an economy that is predominantly one of command or tradition, they too usually have elements of all three systems.

Each economic system, whatever its predominant nature, must answer five basic economic questions:

1. What to produce?
2. How to produce?
3. How to distribute output?
4. How to achieve full employment and price stability?
5. How to achieve economic growth?

The discussion that follows focuses on the way these questions are answered in a market economy. Before considering individual questions, however, an explanation of several economic concepts will be helpful.

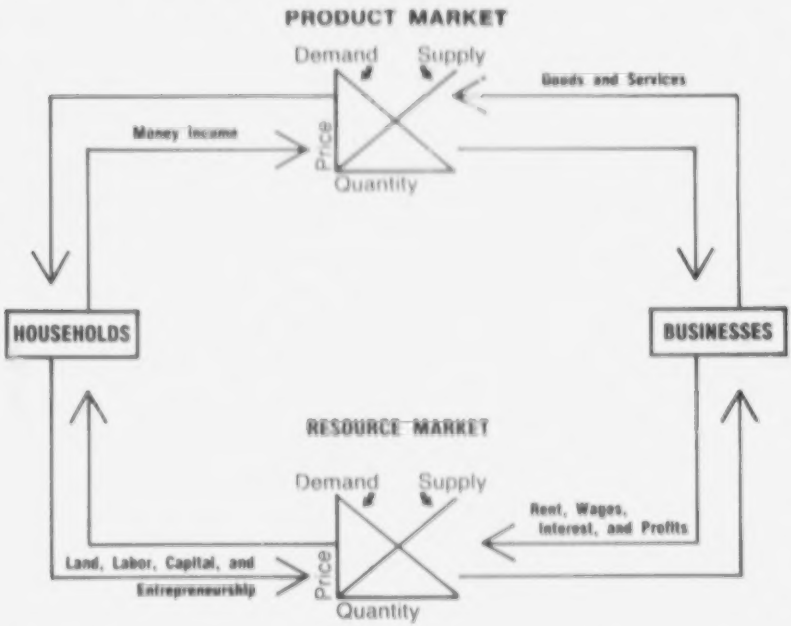
THE U.S. ECONOMIC SYSTEM

How does the U.S. economic system answer the first three questions? The model in Figure I illustrates the central role of markets in an economy such as our own. A *market* is a device that enables buyers and sellers to register their decisions to buy and sell goods and services or the factors of production.

The principles of supply and demand are fundamentally important in the study of economics. They are as essential to economics as are the Newtonian laws of motion to physics. *Demand* refers to the amounts of a good that consumers wish and are able to buy at various prices at a particular time. The principle of demand holds

FIGURE I

CIRCULAR FLOW OF ECONOMIC ACTIVITY



that the lower the price, the more of a good will be demanded. Conversely, the higher the price, the less of a good will be demanded. Demand can be thought of as a schedule of what quantities individuals are willing to purchase at each price. This idea is illustrated by the demand line in Figure I. Consumer votes for goods determine the position and shape of the curve in the product market and business demand for resources determines the demand curve in the resource market.

Supply indicates the amounts of a good that will be offered for sale at various prices at a particular time. The principle of supply holds that the higher the price, the more will be supplied and vice versa. Supply can be thought of as a schedule of quantities that producers are willing to offer at each price. This idea is also illustrated in Figure I. The willingness of businesses to supply goods and services determines the supply curve in the produce market, and the willingness of households to supply land, labor, and capital determines the supply curve in the resource market.

Price is determined by the interaction of the forces of demand and supply for a good. The markets illustrated in Figure I provide a mechanism for determining the supply and demand for both consumer goods and productive resources. The intersection of the demand and supply for a consumer good determines the equilibrium or market clearing price. Only at this price will the quantity of a good that consumers are willing to buy equal the quantity of a good that suppliers are willing to sell. A price set above equilibrium will create a "surplus," as in the case of government price supports for agricultural products or the minimum wage. A price set below equilibrium will create a "shortage," as in the case of rent control or interest ceilings.

WHAT TO PRODUCE?

The first question each economic system must answer is "What to produce?" In a market economy, consumers vote with their dollars to purchase a given good in markets. In the market for goods and services, for example, demand and supply determine the prices of oranges and the quantity that will be produced (see Figure I). As prices are determined by the interaction of supply and demand, they act as a signaling and rationing device. A rising price for oranges may signal producers to supply a greater quantity. A rising price for cars may force consumers to forego a purchase they would like to make. This explanation of price determination assumes a competitive market where neither buyers nor sellers can control market price and producers have relatively free entry and exit. If the conditions of competition are not met and markets are dominated by a small group of sellers, such as the OPEC cartel, then the equilibrium price will be higher and less of a given good will be produced.

In summary, the question of what to produce in this simplified model of a market economy is determined by consumers voting in markets to buy an array of goods and producers responding to these price signals to supply the goods demanded.

HOW TO PRODUCE?

The second question each economic system must answer is "How to produce?" A market economy has specific incentives that lead producers to combine the factors of production in the most efficient or least costly ways to produce those goods and services that consumers wish to purchase. The most important incentive for producers in a market economy is *profit*—the net

returns that remain when all costs of production are subtracted from total revenue obtained from the sale of goods.

The desire for profits and the spur of competition force producers to produce in the most efficient method possible. Here the relevant definition is "workable" or "effective" competition in which market prices reflect individual demands and long-run supply conditions without collusion on the part of either buyers or sellers. In a given industry, there may be only a handful of producers but effective competition may still exist. In the case of the auto industry effective competition was established with the increased import of autos in the United States in the 1970s and the addition of three or four auto producers in Japan. American producers were forced to produce more efficiently by adopting new techniques for using robots and establishing better inventory controls, for example.

Of course, producers, like most individuals, prefer competition for others and freedom from competition for themselves. Thus, oil producers may attempt to form a cartel to limit competition and increase profits. Producers in the trucking or airline industry may influence a regulatory agency that sets minimum prices in order to eliminate competition. Because of attempts by producers and sellers to limit competition, government needs to take positive steps to maintain competition and refrain from actions that limit it.

In their attempts to produce goods as efficiently as possible, producers of goods and sellers of services will be forced to engage in occupational, technological, and geographical specialization of labor. In the area of geographical specialization of labor, the principle of *comparative advantage* is particularly important. This principle holds that each state, region, or country will increase its standard of living if it specializes in the production of those goods and services that it can produce with the greatest relative efficiency. The principle of comparative advantage helps explain why producers in Florida specialize in growing citrus fruit and producers in Iowa specialize in growing corn.

Following the principle of comparative advantage can increase competition for some producers in a country. As a result, they may seek to limit competition by persuading the government to restrict the import of goods from abroad. The notion of comparative advantage holds that such restrictions will result in a less efficient production of goods and a lower standard of living for both countries involved.

HOW IS INCOME DISTRIBUTED?

The third question that every economic system must answer is "Who gets what is produced?" or how income is distributed. In a market economy the answer again is found in the marketplace through the interaction of supply and demand for the factors of production. For example, if large numbers of people are willing to pay to see basketball players or rock stars perform, the demand for their services will be high. Since supply may consist of a single individual or a very limited number of individuals, those who have the desired attributes will get a relatively big slice of the economic pie. The income individuals obtain in the market reflects only the demand and supply for their services, however; it may or may not reflect judgments of the contribution that a given individual makes to society. A case in point—a Nobel prize-winning scientist may earn significantly less than a movie star, given the supply and demand for the services of each.

Of course, markets are not the only consideration to explain the distribution of income. For example, businesses may form monopolies to limit the supply of a commodity they produce in order to increase profits. Also, if all income were distributed according to the laws of supply and demand, individuals who could not produce goods and services efficiently might end up with little or none. Most people would agree that one role of government is to provide some support to those in poverty. As a result, government in most market economies will step in to transfer income to individuals who are believed to receive inadequate incomes in the marketplace.

GNP, FULL EMPLOYMENT, AND PRICE STABILITY

Before discussing the two remaining questions that every economic system must answer, three essential concepts need to be defined: *gross national product, full employment,* and *price stability.* Gross national product (GNP) is the total market value of all goods and services produced in a given period. The three main components of GNP are expenditures on consumption, investment, and government. Consumption includes spending on durable goods such as autos and furniture, nondurables such as food and clothing, and services such as teaching. Consumption constitutes about two-thirds of GNP. Investment includes expenditures on factories and machinery by businesses and on homes by households. Government includes the purchase of goods such as

tanks or bridges and services such as those of a legislator. Dividing GNP by the population of the nation gives the per capita GNP, which can be considered a reflection of the standard of living.

The second concept, full employment, is the condition that exists when jobs are available for those able and willing to work for a going rate of pay. Full employment does not mean zero unemployment. Even when the economy is operating at high levels of output, two kinds of unemployment will still exist—frictional and structural. Frictional unemployment results from imperfections in the labor market such as lack of information about job availability or unwillingness of workers to move to places that have job openings. Structural unemployment results from the mismatch of worker skills and job needs. When unemployment rises above minimal frictional and structural levels, the economy is no longer at full employment and is not functioning with maximum effectiveness.

The third concept is price stability. If a market basket of commodities can be purchased with the same number of dollars from one period to another, then prices are stable. Inflation, which is defined as an increase in the general price level, results when more dollars must be used to purchase a given market basket of goods. In a period of inflation, GNP may rise solely because of the rise in prices but GNP corrected for the inflation, or "real GNP," may remain constant.

With these definitions of GNP, full employment, price stability, and inflation, it is possible to examine how our economy answers the question "How to achieve full employment and price stability?" Just as supply and demand are used to determine the amount of a given good to be produced and the price at which it will be sold, so in this area of economics aggregate demand and aggregate supply are used to determine the level of production for all goods and services and the average price at which they will be sold. Aggregate demand is the total spending on goods and services in a given period of time; it is divided into spending by households, businesses, and governments. Aggregate supply is made up of the total goods and services in an economy at a particular time. When aggregate demand (the demand of households, businesses, and government for GNP) falls short of aggregate supply (what the economy is capable of producing), then there is no longer full employment. Unemployment will increase and a recession or depression will follow. When aggregate demand

increases more rapidly than aggregate supply, especially with full employment, then inflation will occur. A major objective of our economic policy is to ensure that aggregate demand remains equal to aggregate supply at a level that achieves both full employment and price stability.

Monetary and Fiscal Policy

The government has two major tools to keep aggregate demand and supply in balance at full employment and price stability—*monetary policy* and *fiscal policy*. Monetary policy is the control of money and interest rates to achieve this balance. Control of the money supply in the United States is the responsibility of the Federal Reserve System (the Fed), an independent agency of the federal government. Money in the United States today consists of currency, including coin, and the demand deposits (checking accounts) created by the depository institutions (principally banks and savings and loan associations). Depository institutions create demand deposits, which constitute the major part of the money supply, by making loans to households, businesses, and governments. Since these institutions are required by law to keep reserves behind each dollar of demand deposits, the Federal Reserve System has virtually complete control of bank reserves. By giving banks additional reserves, the Fed can encourage them to make additional loans, and, as a result, expand the money supply. By reducing or limiting the flow of reserves, the Fed can decrease the money supply and, as a result, reduce aggregate demand.

In the short run, increasing the money supply is likely to bring down interest rates. This is usually an acceptable, in fact desirable, policy for Congress and the President to implement. Limiting the growth of the money supply, however, usually increases interest rates and may lead to recession—a policy that Congress and the President often find difficult to implement even when economic conditions call for it.

More recently the traditional view of discretionary monetary policy has been called into question. The "monetarists" have argued that the economic system is basically stable unless discretionary monetary policy itself introduces instability. They believe that an automatic steady, predictable increase in the money supply to match the increase in productive capacity is the best monetary policy.

A second tool that can be used to influence the balance between

aggregate demand and supply is fiscal policy—the use of the tax and spending power of the federal government to control levels of aggregate demand and supply. Tax and expenditure policies are controlled by the Congress and President and carried out by the U.S. Treasury. If the federal government increases its expenditures without increasing taxes, thereby causing a deficit, aggregate demand will be stimulated and levels of employment and prices will increase. Conversely, if the government taxes more than it spends, thereby creating a budgetary surplus, aggregate demand will be decreased and levels of employment and prices will go down. A tight fiscal policy—one that reduces budgetary deficits or creates budgetary surpluses—may be unpopular with Congress and the President. They may be reluctant to adopt such an economic policy because of its short-run costs even though it is likely to bring long-term benefits to the nation.

Recently there has been an increased emphasis on the effects of fiscal policy on aggregate supply as well as on aggregate demand. The supply-side school, for example, argues that tax cuts that increase work and investment may significantly increase aggregate supply.

ECONOMIC GROWTH AND PRODUCTIVITY

The fifth and final question that every economy must answer is "How to achieve economic growth?" *Economic growth* is usually defined as growth in real GNP. Our ability to create real economic growth is very limited. From 1900 to 1950 it was less than 3 percent per year. From 1950 to 1970—one of the great growth periods in U.S. history—real GNP grew at an annual rate of almost 4 percent. Approximately 1 percent of this growth came from the increase in population. An increase in economic growth that results from an increase in population (and the work force) does not increase the standard of living or per capita GNP, for more GNP has to be divided among more people. In the period from 1950 to 1970, the remaining 3 percent in average growth rate came from increases in productivity that did result in increases in the U.S. standard of living.

Productivity, the output per person, is a measure of the efficiency with which the average person in the work force can create GNP. This increase in per person output increases the national well-being or standard of living. The annual increase in productivity of 3 percent from 1950 to 1970 meant that the standard of living in terms of real GNP doubled approximately every 23 1/2 years. It

is, of course, possible to increase economic growth by increasing the population and work force. The more important question, however, is how to increase productivity per person as well as the standard of living.

The three major factors that contribute to increased productivity are (1) investment in human capital, (2) investment in physical capital, and (3) technological advance. All three factors contribute to economic growth through the process of savings and investment. Savings take place when individuals and businesses refrain from consuming all their income. Investment occurs when these savings are used in the productive process. Investment in human capital refers to the education and training that improves the knowledge and skills of workers. Investment in physical capital refers to the factories, machines, and equipment used in the productive process. Technological advance is the introduction of new techniques or methods of production. It can include new techniques ranging from the assembly line and the supermarket to the introduction of new products that better satisfy human wants. It should be emphasized that the acquisition of human or physical capital or investment to achieve technological progress involves an opportunity cost. When resources are used to increase economic growth, they cannot be used to increase current consumption.

If a nation wishes to encourage economic growth, it may follow many diverse paths. A major factor is the provision of a framework of economic and political stability with incentives that encourage investment and technological advance. A tax and regulatory system may reward and encourage or retard and discourage the growth process. One of the principal attributes of a market economy, compared with a system of command or tradition, is that it provides a framework of incentives that apparently encourage technological advance and economic growth. Government also plays an active role in this area. Its expenditures on basic research or the infrastructure of the nation make important contributions to stimulating economic growth.

CONCLUSION

This discussion of the structure of economics has considered many major concepts and principles. If one set of principles could be considered most important for achieving economic literacy, however, it would be the laws of demand and supply. Individuals who understand how supply and demand operate in a market

economy can deal effectively with many aspects of the economic system—for example, the determination of prices, the allocation of resources, and how aggregate demand and supply work to determine levels of employment and prices. Such individuals will be able to make more informed economic decisions in their personal lives and as citizens.

In a political democracy, where the votes of its citizens influence the framework within which the economy functions, a prosperous economy requires an economically literate electorate. Accordingly, it is vital to bring minimum levels of economic literacy into our schools in a structured manner and at several points in the K-12 curriculum. Economic literacy is an essential ingredient in the successful functioning of our economic and political systems.

4. Teaching Economics to Children

by Mark C. Schug and Beverly Jeanne Armento

How do you decide what to buy with your money?

"I look in my hand before I go to buy something," responded a seven-year-old.

"It really depends on what you like and what you need; that's one way to decide," said a five-year-old kindergartner.

These children were two of 355 three- to sixteen-year-olds who participated in a recent study of economic understanding (1). Their responses illustrate a few points about the informal ways that elementary school children think about themselves as participants in the economic world. When asked this particular question about decision making, younger children, ages three to five, typically responded by naming actual items they wanted to buy. They gave concrete answers and they often depended on an authority figure for help with their decisions (for example, "Your momma will tell you what to get").

Six- to seven-year-olds better understood the question and suggested the methods they use for decision making; older children generally applied more criteria to their choice-making behavior (for example, a twelve-year-old replied, "I ask: Do I really need it, is it worth it, and how much does it cost?"). Within particular age patterns, there was much variation, as the five-year-old kindergartner illustrates. Undoubtedly, teachers will find a wide range of economic experience and thinking in their own classrooms.

This chapter discusses the informal knowledge children construct about the economic world as well as the more formal ways that elementary school teachers can use to teach economic thinking in their classrooms.

CHILDREN'S INFORMAL ECONOMIC EXPERIENCES

Many children are already participating to some extent in the economic system. They are most often involved as consumers. Weekly allowances provide them with some discretionary income

to use to purchase or save for goods or services they desire. Some older children are becoming familiar with the role of worker. They may be paid for doing simple tasks around the house or they may assume larger responsibilities such as helping neighbors with various jobs. Some children may even engage in activities that have characteristics of entrepreneurship. For example, taking responsibility for a newspaper route where a young person has to perform a service, collect payments for the service, pay for the product, and keep the remaining revenue as the "profit" is an activity recognizable to children and, in many ways, similar to running a small business.

Recent research on the development of economic understanding (1, 4, 5, 8, 9) suggests that economic thinking and general concepts develop in much the same way. That is, concept response patterns on economic topics tend to progress from more egocentric to more objective notions; from tautological, rule-oriented to more generalizable answers; from more inconsistent and narrow to more consistent and accurate responses (1).

Some specific examples of children's economic reasoning will help to illustrate a child's view of the economic world. Schug and Birkey (9) interviewed 70 children from an urban area in preschool/kindergarten, first and third grades. They found that nearly half of the participating children were developing a basic understanding of some economic concepts such as scarcity and opportunity cost. For example, many were able to recognize that their economic wants could not always be met either because their income was limited or because their own economic needs and wants were too great for complete satisfaction. When asked if they felt they had all the things they wanted, some typical responses were "My mom doesn't have that much money to spend for me" or "I might want something and it might cost more [and I won't have enough] money."

Children's reasoning about more abstract economic ideas such as price is more complex. For example, Schug and Birkey studied reasoning about price by asking the children to name some things that cost a lot and some things that cost a little and to explain their answer. Many of the youngest children in the study suggested that the price of an item was related to its physical size. "Some games [cost a lot] because they're so big" and "Penny candy [costs a little] because it's just a little bitty thing" were typical responses. The third graders felt that price was related to the labor and tools involved in making the product or the function or task

the product performed. "A lot of things are made by hand" and "A refrigerator [costs a lot] because it's cold and you can really put your food in there and make it cold" were characteristic responses. Although the older students used more criteria to explain price, none of the children in this study suggested that market factors such as supply or demand had anything to do with the price of the goods they identified.

We know that some economic concepts are easier to learn than others; the simpler concepts have more concrete examples and simple definitions, and are generally prerequisite to more complex and abstract concepts (2). In their everyday experiences, young children appear to be developing intuitive understandings of many of the more concrete economic concepts such as goods, services, consumer, producer, and choices. However, many of their economic experiences are disconnected. Children may not naturally come to understand the patterns of relationships that connect economic concepts. Part of the role of economic education in the elementary school, then, is to help students refine these experience-developed ideas.

BUILDING ON CHILDREN'S ECONOMIC EXPERIENCES

One way that parents and teachers can enhance the economic education of young children is to be alert to the numerous informal opportunities for teaching economics through everyday experiences. Cooperative activities between parents and teachers can help children become more aware of their economic experiences. For example, parents can give young children small amounts of money to use for small purchases at a nearby store. This activity enables children to become aware of ideas such as voluntary exchange, decision making, and trade-offs. The notion of making informed economic decisions can be extended by helping children become aware of family financial matters. The mystery of why some things are purchased and others are not can be reduced by discussing with children the family's economic goals and the relation of financial decisions to these goals. Children can benefit from gaining a realistic view of the family's financial situation and can understand in a more meaningful way how decisions are made.

Other activities can help dispel children's misconceptions about financial institutions that many adults take for granted. For example, children sometimes think that banks are places where

people go to simply get money. The idea of withdrawing money from personal accounts may be a difficult concept for them to understand. Similarly, ideas related to loans, interest rates, and investment alternatives may be equally puzzling. Parents and teachers can help children become better informed about the services of financial institutions by bringing them into contact with nearby organizations—for example, by encouraging them to open their own savings accounts. Perhaps a local banker could be persuaded to develop a special savings program for elementary-age children. Similarly, other financial institutions such as stock brokerages and credit unions could be encouraged to develop special programs to appeal to young people, their parents, and their teachers.

MORE FORMAL ECONOMIC EDUCATION EXPERIENCES

A wide range of sound and interesting curricular materials and instructional techniques are available for use in elementary school classrooms. Organizations such as the Joint Council on Economic Education and the National Center of Economic Education for Children produce a variety of such materials. Recently, Saul Z. Barr (3) developed a booklet of activities for teaching economics to young children. (See Chapter 9 for additional information on teaching materials.) Also, most elementary social studies textbooks include basic economic concepts such as people's needs, wants, and scarcity. The following pages contain other suggestions that teachers can use to help students expand their conceptions of the economic world.

Using Natural Classroom Events

Economic education in the elementary grades should begin by focusing on the concrete experiences of children. Learning activities can be designed to help children become aware that they make economic decisions every day. Many occasions involving scarce resources occur daily in most classrooms. Teachers can use these opportunities (for example, not enough playground equipment for all students, not enough red construction paper left, not enough time to complete a given task,) to help children identify the problem, the alternative choices available, and the consequences of each choice.

An example of a classroom choice experience might involve

how to use money collected for a class trip. Students could begin by listing some possible alternatives—such as going on a picnic to a state park, taking a train trip to a nearby community, or going on an overnight camping trip. After listing the alternatives, the class might consider what goals are important in making a decision. In this case the goals might include the following:

1. Everyone should be able to go on the trip.
2. There should be no additional expenses to the class.
3. Parents and teachers agree the trip is safe.

The next step is for students to evaluate the alternatives according to the goals. To do this, the group might use a simple decision-making grid, giving each alternative a plus or a minus sign under each goal to show whether the alternative fulfills the goal. The alternatives and goals listed will, of course, vary with class suggestions, but the following chart illustrates how the grid might look:

Decision Grid for a Class Trip

	Everyone goes	No additional expenses	Safe
State park trip	+	+	+
Train trip	+	-	+
Overnight camping trip	-	-	+

After evaluating the alternatives, the class must make a decision. Students should be reminded to study each goal and alternative carefully. Each person has different values. Individuals should consider which goals are most important to them, how well each alternative fulfills the goals, and then make a decision.

The steps in this decision-making process are a simple and yet powerful way to help young people make informed decisions. The aim is to help children become more reflective in their own choice-making behavior and more aware of the alternatives and trade-offs involved. This approach has been widely used as part of the *Trade-offs* and *Give and Take* videotape series developed with the help of the Joint Council on Economic Education (see Chapter 9). It represents a simplified form of cost benefit analysis used in economics to help citizens make informed decisions. It is useful in classroom scarcity situations and in making policy decisions such as which class rules are best or which candidate for elected office most deserves a vote.

Developing Language Skills and Economic Concepts

Many examples of economic experiences occur in children's literature, in basal reading textbooks, and in poems and songs. Teachers who are alert to the economic content can, by questioning, help students identify ideas they have already studied or become interested in new topics and issues.

For example, older children might enjoy reading and discussing books with economic content such as *How to Grow a Hundred Dollars* by Elizabeth James and Carol Barkin (Lothrop, 1979). In addition, Seefeldt (10) suggests the following language-related activities for teaching economics:

- Develop the idea that everyone has wants by having students make a booklet or folder called *I wanted, I Want, and I Will Want* and discuss if they will be able to satisfy all the wants they identify.
- Use folk tales and stories about wanting things such as *Cinderella* and *The Rabbit Who Wanted Wings* to initiate a discussion on wants and needs.
- Read the poem "The Animal Store" by Rachel Field to the class and then have students role play the purchase of a pet.

The Book Company, a carefully designed and highly teachable curriculum package developed by the Washington State Council on Economic Education by Diane Reinke and Margit McGuire, emphasizes the development of creative writing skills along with improving economic understanding. These activities introduce upper primary students to basic concepts such as wants, needs, resources, labor, capital, scarcity, and interdependence by having students produce bookmarks and eventually their own books for sale. The authors suggest that teachers include related lessons on creative writing during language arts classes as a good way to integrate economics into the elementary curriculum.

Simple Experiments

Economic ideas can often be illustrated in the classroom by means of simple experiments. The idea of specialization and division of labor is a widely used example, as in the following activity. Divide the class into small groups of four students. Explain that each group is to produce a simple product such as a birthday card and the purpose of the experiment is to see if different forms of production will produce more cards. Explain

further that the steps involved in the production process include cutting the paper to the correct size, folding the paper, drawing a design on the card, and stacking the cards in neat piles of ten. Provide each group with paper, several scissors, pencils, and crayons. Now explain that half of the groups will use an assembly line to produce the birthday cards and the remaining groups will use a craft approach with each individual producing each card from beginning to end. Allow a few minutes for all the groups to practice making their cards. Finally, run three five-minute production rounds. At the end of each round, keep track on the chalkboard of the number of cards each group produced.

This experiment usually results in the specialized assembly line groups producing more cards than the craft groups. In other words, the specialized groups with the same number of people as the craft groups produce more cards. Followup discussion can focus on the advantages and disadvantages of specialization. Some students might comment that the specialized groups produced more cards but the jobs were somewhat boring; other students might observe that their more specialized skills like drawing well or cutting straight were better used in the assembly process.

This experiment can be extended through class discussion to introduce other economic ideas. For example, the idea of technological change can be developed by asking the class how the production of the birthday cards could be improved. Students quickly point out that the introduction of such things as a rubber stamp of the design and an ink pad would save labor, as would a duplicating machine that can easily reproduce the card design. Students can readily see that technological change can improve production and that scarce labor resources can then be reallocated to other areas.

The principle of demand can also be illustrated in a widely used simple experiment. The teacher can introduce this activity by explaining that the class is going to explore how behavior changes as prices for goods and services change. Ask students to imagine that they are about to purchase their favorite candy or snack. The problem is that they have to decide how many of these items they wish to buy at each of these prices: $.01, $.05, $.10, $.15, $.25, $.50, $1.00. Give all students a sheet of paper listing the prices. Ask them to write down the number of candy bars they would purchase at each price. Next, ask volunteers to read off how many candy bars they would buy at each price. Write the figures on the chalkboard. The results usually look like this:

Students	Prices						
	$.01	$.05	$.10	$.15	$.25	$.50	$1.00
Tom	250	100	50	25	15	3	1
Doris	300	75	30	10	5	0	0
Sonya	25	20	15	10	5	2	0
Martin	500	125	100	80	20	5	1
Totals	1075	320	195	125	45	10	2

After making the chart, ask students to explain in their own words what seems to be happening. They note that as the price increases, their classmates are willing to buy less of their favorite candy. Conversely, as the price decreases, they are willing to buy more candy. This activity can be followed up by graphing the results in the form of a demand curve.

Simulating the Real World

Many teachers have helped to pioneer various activities that provide the direct experiences elementary students often need to understand economic concepts. One such activity involves young people in manufacturing and marketing a product for other students in their school. An important incentive for students is their desire to make a profit, which they usually use to finance a class activity such as a spring picnic or a special field trip. (The class decision on how to use the profit is in itself an exercise in economic decision making.) First, the class decides what product to produce. Stuffed animals, school pennants, or greeting cards are often suggested. Second, the teacher explains that businesses usually try to study the market before they make a final decision on whether to produce a new product and at what price. The teacher then arranges for the class to conduct a market survey of other students in the school. The class designs a questionnaire and distributes it to a sample of students in other classes. When the information from the survey is available, the class must examine it to determine if a particular product is attractive to potential consumers.

Following the market survey, students take a series of steps to obtain financing for the enterprise, to market the product, and to keep records.

1. They decide what resources, including materials and labor, are necessary to produce the product.
2. They arrange to borrow the money to buy the materials.

Often, the teacher makes arrangements with the principal to obtain the funds at a specific rate of interest. Some teachers, however, use this as an opportunity for the class to contact a local banker to simulate a real business obtaining funds from a financial institution. The banker might be invited to class to explain the steps involved or the class might take a field trip to a local bank to learn about the services provided by banks and other financial institutions.

3. They decide how to organize production. Most often, assembly lines have to be organized with students assigned to different tasks depending upon their skills. Many teachers find it wise to assign two or three students to quality control duties to make sure the product is as good as possible.
4. They decide the price of the class-produced item. What factors should be considered in the pricing decision? What might happen if the price is unusually high? very low?
5. They develop a marketing strategy for the product. Some students will need to develop slogans and make posters to advertise the product. Decisions will also have to be made about who will sell the product and at what times during the schoolday.
6. They arrange for some students to be in charge of keeping the books. At the end of the activity, these students will need to repay the loan with the specified interest and calculate the profit or loss.

Class discussions and direct instruction on some of the concepts involved should accompany any simulated activity. A range of economic ideas can be introduced and developed with the simulated business activity. Among these are choices, specialization, resources, market, supply, demand, price, consumer, producer, and production. A simulation also provides opportunities for students to develop affective and interpersonal skills as well as the more traditional cognitive skills and concepts.

Numerous other activities can provide students with concrete learning experiences. For example, Marilyn Kourilsky (6) has developed an elaborate program called the Mini-Society. As the name implies, this program simulates in the classroom many of the economic processes of our society. After a series of introductory activities that help students see examples of scarcity in their classroom, students choose the types of businesses they wish to establish—for example, a tutorial service, a postal service, a snack

bar, a bank, a lending library. Detailed directions are included for starting these businesses. Students establish their own currency and can participate in a classroom auction. Through the Mini-Society, they can also evolve their own government structure as the class considers whether to establish an income tax or sales tax to support specific government services. The program also includes teaching suggestions for debriefing the activities to help students reflect on the numerous economic concepts and processes they exerienced.

Neighborhood Study Trips

A final suggested teaching approach is organizing periodic neighborhood study trips. There are many possible sites for such activities. Trips to businesses might include a bank, a fast food restaurant, a specialty import and export shop, a retail store, a shoe repair service, a grocery store, a farmers' market, a print shop, a manufacturer. Students might also look for examples of government services in the neighborhood. These might include visits to a police station, a fire station, a health clinic, or a senior center. Trips to these sites need to be carefully planned so that the community hosts know the purpose of the trip and the type of economic concepts that should be highlighted for the children. For example, an import and export shop might be used to illustrate economic interdependence. A local manufacturer might emphasize technological change and the importance of making a profit. A fast food restaurant, a popular study trip for many classes, might illustrate specialization and division of labor. Other suggestions for the use of community resources are developed in Chapter 8.

CONCLUSION

This chapter has discussed research findings on how children think about basic economic ideas. It has noted, for example, that economic thinking and general concepts develop in much the same way. However, some economic ideas such as scarcity and opportunity cost, as well as goods, services, consumer, producer, and choice, seem to develop more quickly than other, more abstract, ideas such as market price. The important point is that although children have many informal economic experiences, the challenge for teachers is to help students reflect on their experiences to develop and expand their economic reasoning.

Many creative teachers have developed effective teaching methods by considering how children approach economic problems. The following are some suggested techniques:

- Encourage parents as well as teachers to use everyday family experiences at banks and stores to introduce economic ideas.
- Use scarcity situations in the classroom as opportunities to teach economic decision making.
- Integrate economic education into various parts of the curriculum. For example, economics can be taught through folk tales and stories, as well as through creative writing activities.
- Use more elaborate classroom simulations to allow students to participate in various economic processes. For example, have students design and market a particular product.
- Take students on periodic neighborhood study trips to explore local economics in action.

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5. Economics for Early Adolescents

by Ronald A. Banaszak

"Gross national product? Sounds like something somebody chewed up and spit out!"

"Government is more important to the economy because it's government that starts businesses, keeps them up and running."

"Who benefits from the economic system? Just the rich and wealthy, I think."

"The Federal Reserve is the extra soldiers the government has in case of an emergency."

These are some of the uninformed answers to economic questions given by randomly selected eighth graders recently interviewed by the author. They are testimony to the lack of education about out economic system. Such students are unprepared to function as capable economic decision makers. This is unfortunate and potentially dangerous because Americans today are being asked to make critical decisions on a vast array of sophisticated economic issues relating to personal finance, business, and public policy. The future promises only greater complexity. Economic illiteracy weakens our children's potential to lead happy, successful lives and undermines the very foundation of our democratic society.

Understanding our economic system is as important to good citizenship as is understanding our political system. Various education reports issued recently recognized the need for economic education. For example, the Task Force on Education for Economic Growth of the Education Commission of the States and the prestigious National Commission on Excellence in Education recommended that learning to understand our economic system be a basic part of a precollege education (4, 12). The National Council for the Social Studies report "In Search of a Scope and Sequence for Social Studies" declared that "Social studies education has a specific mandate in regard to citizenship education. That mandate is to provide every school child and adolescent with the opportunity to learn the knowledge, the abilities and skills, and the beliefs and values that are needed for competent participation in social, political, and economic life" (13, p. 250). This

statement is typical of many stressing the importance of an understanding of economics for sound citizenship. Further confirmation can be found in the many daily newspaper stories containing references to economic terms and issues.

A TIME TO LEARN HOW OUR ECONOMY WORKS

Early adolescence is, in many ways, a critical period. Young people in this age group are just emerging from the safety of their homes into the larger society, developing biologically and intellectually, becoming more adult but not yet mature. Inquiring, willing to explore, yet needing the security of a peer group, they begin to become participants in the outside world, developing attitudes and values that will remain with them for the rest of their lives.

In other words, early adolescence is an important time in children's lives. And the curriculum needs to effectively address the unique characteristics of students in this age group.

There are persuasive reasons why, properly presented, the study of the economic system in which they live and function is very appropriate for seventh, eighth, and ninth graders. Foremost among these reasons is the change that is occurring in their way of thinking. These students are developing new cognitive abilities permitting more sophisticated and adult ways of reasoning. In Piagetian terms, they are moving from concrete operational cognition to formal operational cognition (17). In general, this means that they are beginning to reason about physical and social events that are unobserved and unobservable. Such changes in thinking mean that students are able to consider economics not as isolated concepts, but as an integrated system. Further, they can begin to understand the viewpoint of others, such as a businessperson concerned about earning a profit.

Economics also has new value to early adolescents because they are beginning to become active participants in the economy. All adolescents make buying decisions and are bombarded with advertising. Most are or soon will be part-time wage earners, mowing lawns or caring for younger children. Many have saving accounts or similar holdings that earn interest. A few even own stocks or bonds. These young people are curious about the economic system and its problems, such as the national debt, unemployment, and the energy supply. They wonder about the role of taxes, why

earnings differ from one occupation to another, and why some products are imported. A systematic understanding of economics and the workings of our economic system can provide them with the tools for making more intelligent personal economic decisions. This information is useful as they begin forming their own judgments on wider economic issues that will influence the future of society.

Also during these vital years students begin to entertain their first serious thoughts about future careers. At this age, their cognitive ability for formal operational thinking allows them to understand that they have a past and a future exclusively their own. They can think effectively about what is possible rather than being tied to what is. Their vocational choices can now take into account their personal interests, abilities, and interpersonal styles in relation to jobs. Their thinking about careers, therefore, becomes more realistic (5).

Early adolescence is an important time for accurate teaching about our economic system because students are still forming their attitudes toward the economy and related topics. The study of economics in middle school/junior high grades provides an opportunity to present students with factual information upon which to build attitudes. Early adolescents are more open and responsive to new knowledge than are students completing high school, whose attitudes are more firmly established and difficult to change. Also, early adolescents who are confident of their own knowledge of a topic are less easily influenced by the opinions of others than are youngsters who feel uninformed (10). Students who do not receive a sound education about the workings of the economy will form their attitudes toward the system from information gleaned largely from the media, information that is often incomplete and incorrect (7). In addition, many young people have become increasingly removed and psychologically alienated from the world of work, both physically and psychologically. In the absence of direct encounters with or sound instruction about the economy, their attitudes are apt to be easily influenced by the opinions of others, however uninformed.

Finally, there is an egalitarian reason for stressing economics for early adolescents. Most young people complete middle school/junior high regardless of their intelligence, socioeconomic background, or career goals. This means that economic education aimed at early adolescents has the potential of reaching almost every student, unlike the more traditional twelfth grade elective economics course.

WHAT KIND OF ECONOMIC EDUCATION IS APPROPRIATE?

The methods of teaching economic content to early adolescents should capitalize on the special characteristics and abilities of these students. On the college level, economics is appropriately taught as an abstract subject. Unfortunately, that method has dominated the teaching of the subject at all grade levels. If economics could be presented only as an abstract subject, it would be most inappropriate for early adolescents. But it need not be abstract. Economics is a part of daily life, a discipline used in any decision about the use of scarce resources—income, time, materials. Economic decisions invade almost every part of existence. College-level abstract economics is distilled from real-world events. Early adolescents need to get closer to those real-world events, largely avoiding mathematical models and advanced analytical tools. For them, economics should be taught at the level of people working together, in an orderly fashion, to supply the goods and services needed.

Appropriate presentation of economic content to early adolescents should—

1. Be concrete.
2. Show people involved in the economy.
3. Involve students actively in the learning process.
4. Relate new knowledge to what students already know.

Applying these principles promotes the learning of economics by combining abstract economic theory with real-world processes. Such teaching also applies what is known about how people learn to the study of economics.

Concrete Presentations

Early adolescents will benefit most from a concrete presentation of economic ideas. These students are in (or are approaching) a transition in their thinking ability from concrete operational to formal operational. To understand the importance of this change in thinking ability for economic education, a brief distinction between the two types of thinking will help.

Concrete operational thinkers are able to classify and order objects, to hold one or more variables in mind simultaneously, and to reconcile apparently contradictory data. Their ability to reason about physical and social events, however, is limited to those they have observed or participated in. In contrast, formal

operational thinkers are able to reason about economic events they have not observed or participated in. They can manipulate information in new ways. They can begin to deal with relations among relationships, such as proportion. They can evaluate their own thinking. They can think about thinking. They can consider verbal statements and propositions and comprehend abstract ideals like justice and freedom. It is important to remember that these are not discrete, static stages that appear overnight. Rather, they are overlapping stages of continuous development.

Even though early adolescents are only beginning to become formal thinkers and some are farther into the transition than others, all will benefit from a concrete approach to the teaching of economics. Concrete experience will help them learn abstract ideas, for it is the building material from which abstract ideas can be constructed (1). By manipulating empirical data gained from concrete experience, students can develop abstract concepts. Even those who are already thinking in a formal manner benefit from concrete experience (2). Actually, formal thinkers may learn better from concrete experiences than concrete thinkers (18). Thus, students might reflect on the role scarcity plays in their own lives. What recent decisions about scarce family resources have they or their families been forced to make? How did they finally choose between various alternatives? Why did they decide to buy a computer instead of taking a longer family vacation? Building on such concrete experiences is the most effective way for early adolescents to develop an understanding of abstract ideas (11).

People-Oriented Content

For early adolescents, it is important to stress that the economy is made up of people making decisions. These youngsters, newly conscious of their peer group, are developing new relationships and self-images, and are beginning to think seriously of their own career choices. Emphasizing people active in the economy builds on these emerging interests and new relationships. It promotes the use of concrete situations and enables students to see better how they fit into the economic system.

Activity-Oriented Content

Fortunately, there are many opportunities to simulate economic activities in the classroom. Students can, for instance, operate a class store. They can establish a budget for their own classroom.

They can engage in many simulations and games that reflect economic reality. These activities further accentuate the involvement of people in the economy and show the relationship between discrete economic activities. Further, and perhaps more importantly, activities promote learning. By involving more senses, activities increase the possibilities for students to learn. Research suggests that active involvement improves both immediate and delayed recall of factual information. As a result of actively participating and seeing an economic concept operate, students can develop an understanding of symbolic representations of the economic concept. This process gives students the opportunity to gradually learn a principle from its concrete representations (21). For example, a market simulation in which students buy and sell goods at different prices, record their transactions, analyze them, and create their own supply and demand graphs is superior to presenting students with arbitrary supply and demand graphs and then having them analyze the graphs. By carrying out the transactions that make up the supply and demand data, students are involved actively. The data have new meaning for them because of their experience.

Manipulating Information

Experiences also provide concrete input from which to develop economic understanding. Students can act upon the content being learned and use it in new situations, thereby learning how to manipulate information. Using and manipulating information leads to a deeper understanding (14). Merely knowing the terms of economics, the technical jargon, does not guarantee understanding. Often students can learn the correct definitions or the "right" answers without understanding what they are saying. For example, many eighth graders recently interviewed by the author commented that the major difference between our economic system and that of the Soviet Union is that we have freedom of choice and the Soviets do not. But later in the questioning, the same students often said that economic decisions in our system are made by the government. The contradiction was not clear to those who had memorized the "right" answer to why our system is different from the Soviet's but did not understand the distinction involved.

Linkages

New knowledge must always be linked to what is already

known. Economic knowledge presented to early adolescents must relate to their personal body of knowledge, yet be sufficiently novel to capture their interest (8). Everyone has a contextual framework learned over time. New knowledge is more powerfully learned if it hooks into such frameworks in a meaningful way. New knowledge also may cause an adjustment to a framework. But if the new knowledge is unrelated to previous knowledge or to a conceptual framework, it will merely be memorized and forgotten, or not learned at all.

At this point it should be clear that the method of teaching economics to early adolescents is more important than the individual concepts or generalizations chosen to be taught. In time, research may identify which concepts or generalizations are more appropriate, but for now, only advanced mathematical concepts can be excluded. Other judgments are premature. Most concepts can be taught to these young people if approached in a way that is concrete, stresses the role of people, includes involvement activities, and relates the new knowledge to the students' present knowledge.

ECONOMICS IN THE CURRICULUM

Economic content can be added to the curriculum either by infusing it into other courses or by establishing a separate economics course. There are advantages and disadvantages to both methods. For a more detailed discussion of the advantages and disadvantages of infusion courses versus specialized courses, see Chapter 2.

Infusion of economics into another course such as American history, civics, or geography can take one of several forms. First, the lesson may be unrelated to the content of the course. Like a current events day, the economics lesson may fill a period but may not be connected to other topics being studied; it may be outside the normal content flow of the course. Second, examples of specific economic terms can be selected from the content of the course. For example, students can be taught the term "scarcity," and then during the study of colonial America asked to find examples of scarcity and the decisions people made because of it. Other concepts such as opportunity costs and incentives can be similarly explained with examples from the course. Third, an economic aspect of a topic already present in the course may be taught. For instance, the Industrial Revolution, the Great Depression, the panics of the 1800s, the establishment of the national

bank and its ending under Jackson, and the impact of economic growth on society are economic topics that could be taught in an American history course. Infusion into existing courses may be as short as a few lessons that are taught in one or several periods, or as long as an entire unit that requires several weeks.

A growing trend is the establishment of a semester or quarter course in economics for seventh, eighth, or ninth grades. Such courses have been offered for years in a few school districts, but those districts are the exception. Part of the new interest in economics for early adolescents is due to the activities of the Foundation for Teaching Economics (FTE), which has selected this age group as its target audience. (Also see Chapter 9.) FTE funds the creation of student materials designed to make it easier for teachers to give instruction in economics. Among their materials is the first textbook specifically designed with a fresh approach for early adolescents (3). It can be used as the basic book for a one-semester economics course. Using case studies of the production processes of common products, the text shows economic ideas being used by individuals. Numerous activities provide many opportunities for students to use their new information. Table 1 summarizes the goals of the textbook and provides an example of what an economics course for early adolescents could be expected to achieve.

FTE also funds the development of other print material, filmstrips, movies, and microcomputer software. All these materials are especially designed for early adolescents and provide teachers with materials—tools—for teaching economic content to early adolescents. In addition, FTE makes grants to school districts to assist in implementing economic education in grades 7, 8, and 9. The Foundation's materials are in use in 46 states, and almost 60 school districts have received implementation grants.

FTE is not alone in its efforts to promote economic education for early adolescents. The National Council for the Social Studies' statement, "In Search of a Scope and Sequence for Social Studies" (13), recommends a one-semester course in economics for eighth or ninth graders. The NCSS report suggests that this course could be paired with a one-semester law education course to create a full year of social studies instruction. Further, Junior Achievement (see Chapter 9) offers a semester-long program called "Project Business," taught by a local businessperson who takes over a class for one period a week. The program uses the businessperson's experiences, but has a standard topical structure.

TABLE 1

GOALS OF A JUNIOR HIGH SCHOOL ECONOMICS COURSE*

COGNITIVE GOALS

Two major goals relating to economic understandings have been identified. These cognitive goals are:

1. Enable students to develop understandings based on facts, concepts, and generalizations of how the U.S. economy works.
2. Enable and encourage students to develop, practice, and apply a variety of intellectual and work-study skills.

AFFECTIVE GOALS

It is important that students develop values that are consistent with our democratic society. The worth and dignity of the individual, regardless of race, color, creed, national origin, ancestry, sex, or occupation, is one such value. The following affective goals have been identified:

1. Enable and encourage students to understand and respect the contribution that individuals make to our way of life.
2. Enable students to reflect on values consistent with our democratic society and to develop, clarify, and act on a personal set of values.
3. Enable and encourage students to participate in class, school, and community activities as individuals and as members of groups.
4. Enable and encourage students to appreciate the fact that our economy is controlled and developed by individuals like themselves, working individuals, and in concert.

CAREER EDUCATION GOALS

In addition to the cognitive and affective goals described, material and activities have been developed that are designed to achieve the following six career education goals:

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*From *Our Economy: How It Works: Teacher's Guide*, 2d ed., by Elmer U. Clawson. Copyright © 1984 by Addison-Wesley Publishing Company, Inc. Reprinted by permission.

1. Enable students to develop a positive attitude toward work and to appreciate its contribution to self-fulfillment and to the welfare and productivity of their family, their community, the nation, and the world.
2. Enable students to recognize that their educational experiences are a part of their total career preparation and development.
3. Enable students to understand the economic systems of our society and become aware of the relationship of productive work to the economy and their own economic well-being.
4. Enable students to achieve sufficient economic understandings and consumer competencies to make wise decisions in the use of their resources.
5. Enable and encourage students to engage in their own career development processes by increasing their self-knowledge and their knowledge of the world of work, of the society that affects it, and to accept responsibility for a series of choices that carry them along the career development continuum.
6. Enable and encourage students to explore career possibilities that will increase their exposure to the options available to them in our economy.

ECONOMIC LESSONS FOR EARLY ADOLESCENTS

The two lessons that follow use the guidelines established in this chapter for appropriate economic education. They are concrete, they show the role of people in the economy, they involve students in activities, and they relate new knowledge to what students already know. The lessons are complete in themselves, and they begin with the individual student and advance to more complex activities.

Each lesson takes only a period or two to complete and exemplifies the type of lesson that could be used in an infusion strategy or in a separate one-semester course as a supplement to other materials. This chapter is much too brief to include an entire coordinated unit, although that is a better way to present economic content. However, teachers are encouraged to develop coordinated units that provide a structure for integrating concepts and generalizations into the framework that students possess as well as into the framework of the course of which they are a part.

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LESSON 1

BEING PART OF THE ECONOMIC SYSTEM

INTRODUCTION

This lesson helps students realize they are participants in the economic system.

OBJECTIVES

After completing this activity, students will be able to identify specific ways they participate in the economy.

MATERIALS

Copy of handout "Being Part of the Economic System" for each student.

STRATEGY

1. Ask students if they are part of the economy. Discuss their answers. (All students participate in the economy in three basic ways—as consumer, worker, and investor.)
2. Pass out copies of "Being Part of the Economic System" to students. Ask them to read it and answer the questions at the end of the handout.
3. Have selected students give their answers to the ways Joe participated in the economy. List these on the chalkboard. If the list is incomplete, ask other students to suggest additional things Joe did.
4. Ask students what things they have done recently as participants in the economy. List these on the chalkboard.
    a. Are their ways different from or similar to the ways Joe participated in the economy?
    b. In what other ways do their parents participate in the economy? Compare answers.
5. Remind students of their answers at the beginning of the lesson about participating in the economy. Have their ideas changed?

STUDENT HANDOUT

BEING PART OF THE ECONOMIC SYSTEM

It was a usual day for 16-year-old Joe Garcia. He awoke at 7:14 a.m. to his clock radio playing "Magic Eyes," the latest hit song. He had almost overslept again. In the kitchen, the family was busy with breakfast. Joe ate a quick bowl of cereal, grabbed his books and car keys, and was off to school in the 1971 two-door Pontiac. The car was on empty, so he used most of his $5 buying a few gallons of gas.

School looked the same as yesterday. Nothing had changed. Lockers slammed, bells rang, and everyone rushed to class, lending each other pencils, pens, and paper.

Joe went to all his classes. He really liked Ms. Phillips, his science teacher. She explained things so thoroughly, but today all Joe could think of was Saturday night's dance and his dental appointment after school. This afternoon he would find out if his braces would be removed before the dance.

After school the dentist had good news for him. His braces could come off!

From the dentist, Joe rushed to Smiling Sam's Sandwich Stand to pick up his pay for last week. A brief stop at the bank for a deposit slowed him only slightly. Then he went on to his hair stylist. When he emerged from the shop, our hero was really pleased with his hair and teeth, admiring his new appearance in the car's rearview mirror as he drove to the local shopping mall. He wanted just the right shirt to go with his new slacks. The "Sale Today" sign at Ralph's Men's Shop caught his eye and he stopped. Inside he found his old school friend, Lisa Carter, assisting customers with their selections. Joe bought the shirt Lisa said looked just right on him and drove home feeling satisfied about his day and the $5 he saved buying his shirt on sale.

Joe participates in our economic system in many ways. List below as many of these ways as you can.

_____

_____

_____

_____

_____

_____

LESSON 2

THE GAME OF BARTER*

INTRODUCTION

In this activity students experience the problems of using barter to exchange goods and services.

OBJECTIVES

Upon completion of this activity, students will be able to—

1. Explain why people engage in exchange or trade.
2. Describe the difficulties associated with barter.
3. Define money and explain how it facilitates trade.

MATERIALS

Two compasses, six pencils, two rulers, two scissors, and four 50-cent pieces of play money.

STRATEGY

1. Ask students why people buy and sell goods and services. (Individuals cannot produce everything they need. Consequently, they exchange the things they can make for the goods and services other people produce.)
2. Explain the difference between barter and trade using money. (Essentially, in barter people directly exchange specific goods or services only for other specific goods or services. With the use of money, specific goods and services are traded for money, and the money received can be exchanged for any other goods or services. The use of money makes it easier for people to trade for what they need or want.)
3. Ask students to describe exchanges they, their friends, or their parents have recently made and then have them classify the transactions as barter or money exchanges.
4. Select two "trader" groups of four students each. Remaining students act as observers of the trading sessions. Group one will be a barter group and must conduct the trades that follow. List these trades on the chalkboard:

---

*The trading situations were adapted from *A Guide to Trade-Offs*, by Bonnie Meszaros. © 1978 by the Agency for Instructional Television, the Joint Council on Economic Education, and the Canadian Foundation for Economic Education. Reprinted with permission.

Player	Has	Wants
A	1 compass	3 pencils
B	3 pencils	1 ruler
C	1 ruler	1 scissors
D	1 scissors	1 compass

5. After the trading session, ask the traders:
   a. What problems did you have trying to make a trade? (Difficulty in finding someone who was willing to exchange what traders possessed for what they wanted.)
   b. How did you solve the problem? (Made several trades to get the desired items.)
6. Then ask the entire class: How might the trading have been made easier? (By using money in the trading process.)
7. Group two will conduct the same trades but will be able to use money (50-cent pieces of play money). Each player is willing to sell the item in the "has" column for 50¢ and is willing to buy the item in the "wants" column for 50¢.

Player	Has	Wants
A	1 compass + 50¢	3 pencils
B	3 pencils + 50¢	1 ruler
C	1 ruler + 50¢	1 scissors
D	1 scissors + 50¢	1 compass

8. After the trading session, ask the class:
   a. In which round was it easier to make a trade? (The second should have been easier, since money is generally acceptable and does not require the correspondence of wants as barter does.)
   b. How does the use of money facilitate the trading process? (It is convenient to use and has general acceptability.)
   c. What is one attribute of money? (Money is anything that can be widely used as a means of payment; that is, it is a generally accepted medium of exchange.)
9. Tell students that money is also a measure of value, a means of storing value, and a standard of deferred payment. Ask them for examples of how money functions in these ways. (Possible answers: Measure of value: Money expresses the value of goods and services in terms of prices—one shirt may be valued at $8 and another at $16. Store of value: Money can be saved to be spent in the future. Standard of deferred payment: Money may be borrowed—or loaned—for repayment in the future.)

6. Economics in the Secondary Classroom

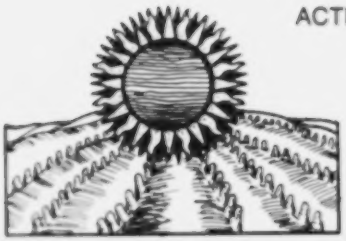
by Judith Brenneke and John C. Soper

You have had a long day in your American history classroom. Now it is time to sit down and enjoy a quiet moment—just you and your newspaper. In your slow perusal of the paper you spot an article announcing a disastrous freeze in the peanut crop. This may be of interest to you personally (especially if you eat peanut butter for breakfast)—but how does it affect your American history class? Does it also affect your colleagues in home economics, business education, or civics? Economics is a tool that can assist teachers in these and several other disciplines in analyzing such current issues in their classrooms.

In fact, the way that you view the peanut crop article may well be determined by what you regularly teach in the secondary school. If, for example, you teach the high school economics course, you may view the article as an excellent jumping off point for teaching about demand, supply, and equilibrium price. In this case, Activity 1 ("Mixing Up the Market") may be helpful. On the other hand, the same activity highlights a factor of particular interest to the American history teacher. As the activity points out, producers will be extremely interested in finding alternate supplies of peanuts—including foreign imports during the period of shortage. However, because of government restrictions, foreign peanuts cannot be imported into the United States. How did this ban on foreign peanuts originate? Did it emanate from the *Declaration of Independence*? Is it recent, brought on by yesterday's freeze? Or was it imposed because of a different set of historical events? (Actually, it was one of many regulations imposed on agriculture during the Depression of the 1930s to protect the failing farm sector.)

Using the peanut freeze, an issue of interest to students, as a stepping stone to exploring America's past will not only enliven your class, but it will encourage students to view American history as an integral part of current and future issues. Home economics or business education colleagues could explore not only the nutritional components of peanuts, but also the effect of the available supply of the commodity on the price of the finished

ACTIVITY 1



Mixing Up The Market

1. A bad drought has hit areas of the country where peanuts are grown. Most of the peanut crop is destroyed.

   What do you suppose will happen to the *supply* of peanuts?

   _____

   What do you suppose will happen to the price of peanuts and peanut products?

   _____

2. News of the drought is spread by television, radio and newspapers. Even before the supply of peanuts gets smaller, people go to their local stores looking to stock up on peanut butter. What do you suppose will happen to the *demand* for peanut butter?

   _____

   What do you suppose will happen to the price of peanut butter?

   _____

3. Makers of peanut butter want to buy peanuts from countries overseas to make more peanut butter. But the home country has a rule against buying foreign peanuts. The rule protects the price of home-grown peanuts.

   What does the rule against foreign peanuts do to the available supply of peanuts?

   _____

   _____

   What does the rule do to the price of peanut butter?

   _____

   _____

4. A company experiments with a product that tastes like peanut butter but is made from soybeans.

   Why is the company interested in trying out this new food at this time?

   _____

   _____

   _____

   If the soybean butter tastes and looks like peanut butter, what could happen to the demand for peanuts?

   _____

Good
For You
Delicious

*From *The Big Brown Bag: Economics of the American Food System* by J. S. Brenneke. Copyright 1981 by Food Marketing Institute and Food Marketing Foundation. Reprinted with permission.

good so popular with students. Civics colleagues could investigate not only government intervention in the domestic marketplace, but also world trade, using peanuts as an example. All these classrooms can use current events of interest to students as springboards to illustrate the curriculum. These issues can also be used to teach economics.

ORIENTATION OF THE HIGH SCHOOL

The high school is unique in terms of its disciplinary approach and its dual objectives: (1) training individuals for their life roles as consumers, producers, and voting citizens; (2) preparation for higher education in college or vocational school. This is the strength of the American high school—and also its weakness. A by-product of this disciplinary approach is the teacher complaint, "My time is filled with teaching the required knowledge included in my subject area or course." As a result, the classroom teacher tends to leave general knowledge to "someone else." It may be difficult to think of the application of general knowledge—reading, math, or economic decision making in terms of a specific course—unless, of course, that course happens to be English, math, or economics.

The high school curriculum, however, does not exist in a vacuum. It is just as important for the American history student to understand the economic implications of past decisions as it is for the economics student to understand the implications of economic decisions for the world economy.

ECONOMICS IN THE HIGH SCHOOL CURRICULUM

Economics can make important contributions to the high school curriculum. In order to function effectively in our society, students need to be able to read, to write, to perform mathematical operations, and to think through a problem to arrive at an optimal decision. Economics develops thinking skills and can be used in a variety of courses. The peanut activity is an illustration of its usefulness and wide applicability to the high school curriculum. A basic objective of most classroom teachers is to help students develop the ability to analyze a problem and reach a decision. Economics provides the tools for analyzing the problem, evaluat-

ing the alternatives, identifying the consequences, and reaching a rational solution.

In examining the economic consequences of a current issue, students develop critical thinking skills that they can use for the rest of their lives. They can use the process of economic analysis in their future consumption of goods and services, in their roles as producers in our economy, and in their future decisions as voting citizens.

Economics is a valuable tool in most classrooms. For example, in teaching "music appreciation" to high school students, an exciting activity might involve the analysis of economic conditions underlying the development of particular forms of music. Students could examine the impact of the Depression of the 1930s as portrayed in the music of that era, or the economic role of Blacks as it impacted the spiritual. Or students could examine current music and hypothesize reasons why American music is popular around the world. They could also examine the relationship of music to the different cultures in the United States. Likewise, a consumer education class could examine the use of music in today's advertising, or the illegal markets in cassette and video tapes, and the economic consequences for performers—as well as for consumers.

Economics is a *transferable* skill that is applicable to a variety of situations as well as a variety of classrooms. Instead of learning a list of do's and don'ts for specific situations, students gain a much more transferable skill when they learn to use economic analysis in their critical thinking. They can apply this skill to future situations. Tomorrow, when they have long forgotten the useless and misleading rule that "Short-term credit is bad; long-term credit is good," they will retain the ability to analyze the effects of *changing* interest rates on housing markets, automobile purchases (and auto industry jobs), and even the value of bonds. However, before students can retain something, they must learn it. Hence the role of the teacher in the economic education process is vital.

WHO SHOULD TEACH ECONOMICS?

At this point, teachers may be tempted to say, "I teach American history (or home economics or business education or math). Shouldn't economic education be the concern of the high school economics teacher?" Our answer is, "Yes, but *all* teachers have *some* responsibility for the economic education of our school

children." It is true that the teacher of the junior/senior course in economics has a special responsibility in this area, and a special set of recommendations for teachers of such capstone courses follows. However, economic education can and should take place in a variety of classroom settings. Therefore, every secondary teacher needs to think through the implications of this statement and its impact on what they are now doing in the classroom.

We argue that the teaching and learning of economics can and should be a developmental process for children, starting at very early grade levels and proceeding throughout the school experience. This requires some knowledge of economics and economic education skills by virtually every teacher in the schools, grades K-12. It is not enough for students to take a semester of economics in their last year of high school (though such a capstone course is highly desirable in every student's course of study). The problem with exclusive reliance on the junior/senior high school economics course is that in earlier grades students will miss many great opportunities to develop decision-making skills, as well as the opportunity to apply these understandings in many other school settings and personal experiences. Moreover, students learn economics outside the classroom. In fact, everyone develops notions about economic matters without benefit of formal instruction. All too often, however, these "economic notions," or "street economics," are mixtures of fact and fiction, myth and reality. Unfortunately, most Americans today (students *and* adults) rely on such information as their primary source of economic "understanding." This leads to poor decisions as consumers, as workers, and as voters. It is an unfortunate situation that can and ought to be corrected in the schools by well-trained teachers who understand what to teach and how to teach it. Outside resources can help in this process, but only when and if the teacher understands and controls the process. No concerned educator should back away from this responsibility or delegate it to any individual or group outside the schools.

This last statement implies that there are many groups in the community that want to accept the responsibility for teaching economics to students. And indeed there are. The problem is that there is no guarantee that such groups will communicate the correct understandings and values in educationally sound ways. The teacher must be in a position to make the key decisions in this, as in all curricular matters. Nor should this instruction be left to any one teacher or counselor. Economic decision making is a

skill that should be taught by each teacher in the context of his or her discipline.

Given the importance of economics in the curriculum in general, and especially in the secondary curriculum, how should the concerned teacher proceed? The first question is, Do you feel adequately prepared to teach economics in your classroom, whatever your subject area(s)? If the answer is no or maybe, then you should search out the available options to acquire the background you feel is necessary to do a professional job of teaching sound economics. This is a first step for every teacher. But you do not have to look far to find help.

The Joint Council on Economic Education is a national organization committed to helping teachers and schools incorporate more and better economics into the standard curriculum. The Joint Council has a network of affiliates throughout the nation prepared to assist teachers in this task. More than 250 Centers for Economic Education around the country provide teachers with graduate-credit courses in economic education, in-service training programs, curriculum-development assistance, sound classroom materials, and assistance in evaluating student economic learning. For more information about the services of the Joint Council and other economic education organizations, see Chapter 9.

Beyond the question of professional upgrading to satisfy yourself and your school system that you know what and how to teach in the area of economics, what are some recommended materials, approaches, and curricula for getting the job done? Many state departments of education, school systems, and nearly every Council and Center for Economic Education have available curriculum guides for economic education in the schools. Contact your state Council or local Center, or your state department representative for recommended course outlines, curricula, or general teaching aids to use in your classroom.

INTEGRATION INTO EXISTING CURRICULA

Given that almost all high school teachers should be introducing economic decision making into their curriculum, what resources and aids are available to assist in this task? Supplementary resources for teaching economics are very important because in many cases teachers feel they need to rely on the textbook that has already been adopted. Moreover, no textbook is complete and supplementary teaching resources ought to be used wherever appropriate to cover gaps, to enliven the classroom atmosphere

with nontext activities, and to keep the course current in terms of new developments. Often teachers wishing to introduce some economics into their regular course of study must rely on supplementary resources because the course text contains little or no economic coverage. Even many of the "comprehensive" social studies and basic business texts are deficient in this way, let alone the standard texts in math, language arts, science, and other areas. U.S. history textbooks are often criticized for failing to present basic economic concepts and analyses that are crucial to understanding a particular historical event or period. Tackling the industrial revolution or the Great Depression without benefit of economic analysis or economic reasoning are cases in point. Thus, the teacher should be able to introduce supplementary materials for teaching economics in the secondary curriculum.

Supplementary materials are available that are often either free or very inexpensive. Numerous businesses, labor unions, governmental bodies, and private organizations produce and distribute teaching materials with a special emphasis on economics. How can the teacher decide what is worth using during scarce and valuable class time? Again the ultimate answer is that teachers must decide what is best for their individual classrooms, courses, and students. There is no magic formula for selecting supplementary materials, but there are some broad parameters that teachers can check to be sure specific supplementary materials are "safe" and worth trying in the classroom. For example, who wrote the materials, an educator or a public relations specialist? Did teachers have a role in developing, piloting, or reviewing the materials? Are competent economists involved in at least the teacher background materials? If there is obvious bias in the content, can the teacher use this bias as a teaching point in examining the topic? Note that nearly all nontext materials have some sort of bias—the question is, can the teacher identify that bias, deal with it in the classroom, and point out alternative views of controversial issues? It should also be stressed that biased materials cannot be determined by noting who published or provided them. Some industry-produced material is outstanding for use in the economics classroom, while some governmental and nonprofit organization material is very weak.

One of the most important considerations in introducing supplementary materials for teaching economics is the fit of the materials into the curriculum. If the curriculum fit is poor, even the best materials will fail in the classroom. For example, the classroom activity that follows, "Solving the Airport Noise Prob-

lem," might prove useful in a wide variety of secondary classroom settings. It is a single-class activity with significant current events content over a wide range of social decision-making problems. It contains a clear statement of concepts, instructional objectives, and detailed teaching procedures, as well as evaluation and extension activities. It also minimizes the amount of reading that students must do, while maximizing the amount of concentration on thinking through personal and social values.

There is no one "correct" answer to the airport noise problem, but there is a correct way to approach it. Students should be able to begin by defining the problem itself, a step adult decision makers all too frequently bypass with unfortunate consequences. Students can then (individually or in small groups) list several alternative solutions to the problem. A more difficult step is the statement of a set of criteria for the most desirable solution. Then students should be in a position to analyze each alternative in terms of the criteria established, recognizing the fact that some alternatives benefit some people at the expense of others, and that differing alternatives lead to differing outcomes as far as the criteria are concerned. This is a "classic" problem in social decision making, where economic concepts and understandings are vital to the process of rational decision making. The outcome of the activity is not the "best solution" to the airport noise problem (either specific to this case or to the general problem), but that students gain an understanding of the complexities involved in this kind of decision. They will face many more like it in their lifetimes. And concerned teachers will want to help their students learn at least one sound approach that they may use repeatedly to analyze the consequences of their decisions. A similar decision-making approach is elaborated in Chapter 4.

ECONOMICS VIA THE CAPSTONE COURSE

High school economics teachers may not have to deal with the problems and concerns of integrating economics into another subject matter; however, they must be even more concerned with what will be taught and with the teaching resources necessary to make economics come alive to the high school student. Teacher knowledge and course/curriculum guides may be crucial to the task of economic education, but what text should be used? The first and last answer to this question is what do you find best? There is no one text or curriculum package that works best for *all*

teachers, in *all* schools, in *all* curricula. In many schools, the secondary teacher may be constrained by a districtwide or subjectwide text that has been selected by some other person or group. If so, all is not lost, as many good texts and many additional resources are readily available to supplement (or correct) the textbook already in place. On the other hand, some guidelines might help teachers who have an opportunity to influence the text selection process.

The high school economics course can emphasize either personal applications of economic knowledge or theoretical analysis. Student needs should influence this emphasis. Either type of course will introduce some basic economic concepts. The personal economics course will then proceed to apply these—as well as more advanced concepts—to personal roles of consumer, producer, and voting citizen, emphasizing the need for decision making throughout. The theoretical course will expand these basic concepts into a general introduction to economic analysis that can then be expanded further through a college economics course.

A model syllabus, created by teachers and economic educators of the Ohio Council on Economic Education for a theoretical high school economics course in the State of Ohio, follows. Other states or districts may have different guidelines, but this is one sound example of how to go about the task of structuring the content for such a course.

The course syllabus that has been developed or adopted should provide a basis for textbook selection. The definitive answer to the question "What is the best text?" can be given only in the context of the specific use to which the text will be put. Who are the students? What are the course objectives? (A personal economics course textbook should not be evaluated on the basis of the "Model Syllabus.") Who will teach the course and what preparation will the teacher have? These are just some of the questions that must be answered before making a textbook choice. In essence, the text selection is best left to the end of the curriculum analysis after answering the preceding questions.

ACTIVITY 2
SOLVING THE AIRPORT NOISE PROBLEM*

TIME REQUIRED: 45-50 minutes

MAJOR CONCEPTS: Opportunity costs Externalities
Trade-offs Cost/Benefit analysis

RELATED CONCEPTS: Economic equity
Economic growth
Economic efficiency

INSTRUCTIONAL OBJECTIVES:

Students will—

- Establish priorities among a variety of solutions to the airport noise problem.
- Justify their priorities by explaining the consequences of the alternatives and their relative importance to different sectors of the population.

RATIONALE FOR THE ACTIVITY: Many communities have outgrown their airports, which were designed years ago before the growth of the population and the growth in the size of aircraft. In addition, communities currently surrounding major airports are suffering from "noise pollution." Local communities are having to solve the problem of offering increased air service while, at the same time, trying to decrease the amount of noise generated by the existing air service.

MATERIALS:

1. A copy of the attached handout for each student.
2. Ten sheets of paper marked "A" through "J" in large letters.

PROCEDURE:

1. Give each student a copy of the attached handout. The students are to read the case study and then rank the items according to the instructions given on the handout.
2. Tape the ten lettered pieces of paper to the wall or place them in widely separated places on the floor. Once students have completed their rankings, ask them to stand by the letter of the item that they ranked first. Then ask several students to explain why they ranked that item first. Additional discussion can be generated by asking questions such as the following:

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*Student Involvement Activity developed by Dr. Judith Staley Brenneke and Dr. John C. Soper, Co-Directors, Cleveland Center for Economic Education, John Carroll University, Cleveland, OH 44118.

a. What is the opportunity cost of choosing your highest ranked alternative?
b. What are some of the trade-offs you used in deciding which items have priority over others?
c. How does your first choice improve economic equity? For which group does it increase equity?
d. How do the various alternatives influence economic growth or efficiency?
e. Who bears the costs or receives the benefits of each of these alternatives?

3. You can repeat the process described in procedure 2 by asking students to stand by their lowest priority item. Adjust the followup questions accordingly.
4. An alternative sorting of priorities can be arranged by using the letters to represent ranks rather than alternatives. Using the same priorities that were generated in procedure 1, select one alternative (such as "A. Move the airport") and ask students to stand by the *rank* they gave that alternative. With the new sorting, ask students to reflect on how the class feels about the priority of that alternative.
5. When students are back in their seats, give them a chance to change their rankings if their opinions have changed as a result of the discussion. Clarify with students the economic goals with which they established priorities.

EVALUATION:

1. Assess quality of student contributions to class discussion.
2. Ask students to write an analysis of the costs and/or benefits for selected alternatives.

EXTENSION ACTIVITY:

Set up a role-playing situation in which individuals or groups are assigned the following roles:

1. Airport-area resident
2. Owner of an area business dependent on good airline or airfreight service
3. Airline pilot
4. Frequent flyer
5. City council member
6. Airport manager.

Have students (as individuals or in groups) study the proposed solutions and develop arguments in favor of the solution they choose (given the role they have been assigned).

STUDENT HANDOUT

SOLVING THE AIRPORT NOISE PROBLEM

In the 1930s a large city constructed an airport at its western boundary. Fifty years later, aviation has expanded substantially and aircraft have changed radically in size, speed, and lift capability. Airport authorities state that "unless our runways are extended and improved, our airport will be unable to accommodate the new generation of aircraft and our city will become a second-class backwater with greatly reduced airline service."

Since the 1930s the city has expanded toward and around the airport, because of the airport and improved roads and rapid transit lines leading from the central city. Airport-area residents are very upset about the prospect of even *more* noise pollution from the proposed runway improvements. Even now they find the aircraft noise unbearable, especially at night and on Sundays. What should be done? Rank these alternatives in order of their priority for you by placing the appropriate letters in the spaces below:

A. Move the airport outside the population area.
B. Ban flights on Sunday.
C. Require quieter engines on airplanes (i.e., retrofit).
D. Change takeoff procedures to reduce noise.
E. Begin a curfew on flights from 8:00 p.m. until 7:00 a.m.
F. Stop planned runway extensions.
G. Tax night flights.
H. Compensate "noise victims" with cash.
I. Tax jets according to noise levels.
J. Do nothing.

	Rank	Alternative
MOST PREFERRED	1	_____
	2	_____
	3	_____
	4	_____
	5	_____
	6	_____
	7	_____
	8	_____
	9	_____
LEAST PREFERRED	10	_____

MODEL SYLLABUS*
ECONOMICS

I. THE IMPORTANCE OF ECONOMICS

A. Problems of Society
   1. Inflation
   2. Unemployment
   3. Income Distribution
   4. Promoting Economic Growth
   5. Productivity
   6. Economic Security

B. A Way of Thinking
   1. Use of cost versus benefit analysis
   2. Use of costs and substitutes (decision making)
   3. Use of economic models
   4. Use of economic measurements
   5. Use of marginality or incremental changes
   6. Use of equilibrium analysis
   7. Short-run versus long-run analysis
   8. Economic goals
   9. Making trade-offs

II. THE ECONOMIC PROBLEM: ECONOMIC WANTS

A. Scarcity
B. Production and Distribution
C. Allocation of Resources
D. Alternative Ways of Solving the Economic Problem
   1. Tradition
   2. Command
   3. Market System

III. HOW A MARKET ECONOMY WORKS

A. Circular Flow of Economic Activity
   1. Productive resources—land, labor, capital, and entrepreneurs
   2. Income—rent, wages, interest, and profit
   3. The effect of spending
   4. The creation of goods and services

B. How Consumer Decisions Determine Resource Allocation
   1. Rational economic being
      a. Need for choices
      b. Need to maximize satisfaction
      c. Opportunity costs and trade-offs
      d. Personal decision making
   2. Consumer sovereignty and power

*Prepared by the Ohio Council on Economic Education.

3. Impact of consumer demand on resource allocation in the product, labor, and financial capital market

C. Price Determination

1. Determinants of demand and supply
2. Elasticity of demand and supply
3. Interaction of supply and demand
4. Statics versus dynamics in price determination

D. Different Market Models

1. Pure competition
2. Monopolistic competition
3. Oligopoly
4. Monopoly

E. How Firms Compete in the Marketplace

1. Customer service
2. Product design
3. Advertising
4. Marketing
5. Price

F. Resource Allocation

1. Derived demand: the impact of consumer decisions on factor markets
2. Derived demand: the impact of business and government decisions on factor markets
   a. The relationship of profit and resource allocation

IV. ECONOMIC MEASUREMENTS

A. Measures of National Product and Income

1. Gross national product
2. Disposable personal income

B. Adjustments to Product and Income Measures

1. Real versus nominal
2. Per capita versus total

C. Price Measures

1. Consumer price index
2. Producer price index

D. Unemployment

E. Productivity

F. Public Debt

G. Balance of Payments

V. ECONOMIC STABILITY AND GROWTH

A. Economic Growth

1. Productivity
   a. Work versus leisure

CONCLUSION

Why should economics be taught throughout the high school? Because economics is a decision-making tool that can be applied in a variety of disciplines. This tool will be transferable to students' future decisions and will allow them to improve the quality of these decisions.

Who should teach economics? All teachers should be able to apply economic decision making within the context of their disciplines or courses. This application of basic economic concepts in a variety of courses will make it easier for students to transfer their economic skills to other situations.

How can economics be taught in the high school? Economics can be integrated into a variety of related disciplines (social studies, business education, industrial arts, home economics), in addition to being taught in a stand-alone capstone course. The optimal economic knowledge is obtained through a combination of the two methods.

The only question left is—Are *you* ready to begin teaching economics tomorrow? We hope so—for the sake of your students.

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7. Economics and Global Understanding

by Robert B. Woyach

In recent years, interest in both economic education and global education has grown considerably among educators and within key segments of our communities. Yet, rarely have these interests been more than perfunctorily joined. For many economic educators the world economy seems unnecessarily distant and overly complex for students. For many global educators, economics seems esoteric, abstract, and number-ridden.

However, teaching students about economics without reference to the world economy is like teaching them about American government without reference to the judiciary. Everyday events and opportunities in almost any country today have implications for the economic decisions of governments, business firms, labor unions, farmers, and even the average consumer in the United States. Droughts in the Soviet Union affect the marketing strategies of Kansas farmers. Low wage scales and weak labor unions in South Korea affect Pennsylvania steel producers and Michigan autoworkers. The development of new technologies in Japan can dramatically change the face of local economies in California and New Jersey.

Just as the global economy is central to the study of economic life, knowledge about economics is central to global understanding. Economic interconnections (for example, exports, imports, and international finance) are key elements in the global systems that now bind our world together. It is impossible to understand or appreciate the reality and implications of global interdependence without understanding how national and local economies are affected by the economic decisions and actions of people around the world. Students need to understand their relationships to the rest of the world and to develop the ability to analyze and make judgments about those relationships if they are to be globally aware.

This chapter explores ways in which economic education can further global understanding and vice versa. Actually, there are many ways to approach global economics and global economic issues. One can compare economic systems across countries, or

look at the international forces that influence economic growth and development. One can investigate international economic finance and balance of payments issues, or analyze such basic institutions as the multinational corporation.[1]

One of the most basic, and for educators one of the most useful, dimensions of the global economy is international trade. Trade makes the international economy run. The evidence is all around us. Thus the impact of international trade is a concrete and often obvious part of our daily lives. By analyzing international trade relationships, students can develop attitudes and skills needed in an interdependent world and also learn concepts and skills basic to economic education.

DISCOVERING ECONOMIC LINKAGES AND SYSTEMS

For American business and the American economy, the world market has become an ever-present opportunity—and challenge. In 1981 American firms exported over $185 billion worth of manufactured goods and nearly $234 billion worth of goods overall. By some estimates, one in nine jobs in manufacturing firms is created by exports; one in six jobs depends on imports and exports taken together. American grain farmers routinely sell up to two-thirds of their wheat, corn, and soybeans abroad.

Our economy has also become dependent on the world market for an increasingly long list of basic industrial raw materials, including bauxite (93%) for making aluminum; and chromium (90%), cobalt (90%), and manganese (98%) for making steel. The list also includes potash (66%), an ingredient in agricultural fertilizers, and other key minerals such as tin (81%), nickel (77%), and zinc (62%).

Introducing students to international trade and to the global economy need not, however, begin with abstract statistics, technical jargon, or the formal logic of international trade theories. Trade and the global economy are as near as the corner drugstore or the student's own home. They may indeed be as close as the shirt on his back or the shoes on her feet.

Most people and communities are involved in international trade in various ways. The grain in the local grain elevators of the smallest midwestern towns will probably be shipped abroad at some point. The local brewery probably exports some of its product to other countries. Local auto plants, or auto parts plants, typically export a portion of their output. A glance at the local

yellow pages is likely to reveal a list of exporters and international freight forwarders who sell goods abroad for other corporations.

The most visible and accessible aspect of our international economic involvement, however, is typically imports. Only a minority of American workers are directly involved in selling goods abroad or in the variety of international economic services that go hand-in-hand with trade (for example, banking, insurance, transportation, communications). On the other hand, virtually all Americans buy goods made abroad, or buy goods made with component parts or raw materials from other countries.

STRATEGIES FOR DISCOVERING COMMUNITY AND PERSONAL LINKAGES

Even elementary students can begin to discover and learn about their economic linkages with other countries. They can use this information to develop and reinforce basic math and communication skills. Issues raised by the linkages can also be used to develop critical thinking and decision-making skills, particularly with respect to consumer choices. In the process, students can be introduced to basic economic concepts and to key facts about the United States, the local community, and other countries.

One way for students at all levels to begin discovering their economic linkages with the world is through an inventory of common household goods. They can use the "Inventory of Household Products" to organize and guide the search. For each product category, they can list individual products, along with the country of origin indicated on labels. If a household has more than one product in a category, each should be listed—including those manufactured in the United States.

Students can use the data in the inventory in various ways, working alone or in groups. The following are some examples:

- Have students prepare maps indicating the class's economic linkages with the world. They can use colored lines or yarn to indicate different categories of products, and indicate the volume of products by the ultimate thickness of the lines. The display will not only reinforce map skills but also raise important questions about the class's economic linkages. For example, why are there relatively few linkages with some areas of the world? Why are we linked highly with an area (such as Japan) for certain products and not others? Why are there many American-made goods in some categories and not others?

AN INVENTORY OF HOUSEHOLD PRODUCTS

1. *Transportation Equipment* (cars, trucks, bicycles, motorcycles)

2. *Clothing* (your shirts, slacks, sweaters, dresses, or skirts)

3. *Personal Accessories* (watches, handbags, cameras)

4. *Electronic Equipment and Accessories* (TVs, radios, stereos, records)

5. *Household Appliances* (toasters, blenders, mixers, vacuum cleaners)

- Have the class calculate the overall percentage of items that were made abroad or in various regions or key countries. This data can be displayed and presented on maps of the world, pie charts, or bar graphs. The calculations and charts will reinforce basic math skills and demonstrate students' understanding of mathematical data.
- Have students keep a journal for a period of time (from one day to one week) in which they record their economic and noneconomic linkages with people in other countries. These linkages will include products, news reports, stories on television. They may include contacts with neighbors or foreign visitors, or letters from friends or relatives currently traveling or living abroad.
- Have students write their reflections on what they have discovered about their economic linkages. What has been most surprising? How are their findings related to things they are learning in other courses (such as the impact of European immigration on American history, the oceans, or the metric system)? How do they think their lives are affected by their linkages with the world?

Secondary students can explore their community's economic linkages with the world through other activities as well.

- Have groups of students select a common product produced both in the United States and in other countries (for example, autos, personal computers, shoes, types of clothes). Students can visit local stores or dealerships selling different brands of the product and compare domestic and imported brands in terms of price, apparent quality, special features, after-sale services.

  The comparisons can be used to reinforce basic math skills, to develop writing skills, or as the basis for discussing such concepts as competition, comparative advantage, product differentiation, even cultural convergence.
- Have a group of students prepare a historical profile of automobile imports into the community by investigating used car ads in back issues of a local newspaper. Each student might select a different day (such as the second Wednesday in April) and look up used car ads over the past 10 to 20 years. For each year cars should be coded according to company (General Motors, Volkswagen) and country of origin.

In the data, students will see the economic history of the global auto industry. They will see the rise and fall of a number of car companies, a tremendous increase in the level of imports over time, and a shift in imports from predominantly European to Japanese cars.

Data from the want ad search can be used to stimulate discussions about protectionism, the effects of import competition and technological change. Differences among the students' samples can be used to discuss the nature and limitations of statistical sampling.

These and a variety of other activities for investigating and using personal and community economic linkages have been developed for a number of local communities and states around the United States.[2] Approaching global economic relations through these personal/community linkage activities makes it possible for educators to introduce international trade concepts as students learn about concrete economic relations that exemplify them. Investigating these obvious international connections also provides a launching point for more detailed efforts to explore "hidden" economic linkages and to map the global economic systems in which we participate.

FINDING HIDDEN LINKAGES

Cameras, cars, shirts, and sardines—"manufactured" goods of all types—bear labels that clearly indicate the countries of manufacture. Those labels do not, however, tell the entire story of our economic connections. "Made-in-America" goods (such as Chrysler K cars) often have component parts made abroad (in this case a four-cylinder engine made by Mitsubishi). Americans consume many imported foods (such as sugar) under familiar labels (Coca Cola), and buy imported goods made with American-produced raw materials (such as U.S.-grown cotton in Hong Kong shirts or U.S.-made catalytic converters in Japanese cars).

It is virtually impossible to sort out all these hidden economic linkages. However, students can be introduced to this dimension of their participation in the global economy in a variety of ways. The following are two examples:

- Obtain or draw up a list of key industrial raw material imports into the United States.[3] Have students do research to identify key exporting countries and familiar products that use those raw materials.

- Have students identify some common agricultural imports (for example, coffee, cocoa, tea, sugar, bananas) and then do research on the major exporting countries for each good.

The information on raw material and agricultural imports can again be displayed on maps. In classroom discussions or written assignments, students can be asked to compare their linkages through raw material imports (largely from Third World countries) with their linkages through manufactured imports (largely from the industrialized world). They can be asked to suggest explanations for this difference. The analysis can be useful in introducing discussions about our economic interest in the Third World, the implications of dependence by Third World countries on a few raw material exports, and the economics and politics of growing export crops in countries that must then import significant quantities of food.

Activities that sensitize students to their hidden economic linkages can be introduced or followed up with readings designed to dramatize the extent of our global economic and noneconomic linkages. One such reading, "A Day in the Life of Seymour Someday,"[4] outlines the daily routine of an American student. After reading the one-page story tracing Seymour's day, students can be asked to identify Seymour's economic connections. These include an alarm clock from Japan, a glass of hot chocolate, tapioca pudding, and an imported bicycle.

A longer followup reading, which can be presented dramatically with upper elementary and middle school/junior high students, reveals Seymour's less obvious linkages. Students may, for example, realize that Seymour's alarm clock may be made abroad, but they rarely recognize their connections to various multinational corporations (such as Sears). Nor are they aware of the global culture in which they participate simply by wearing blue jeans.

The Seymour Someday readings can show younger students the vast array of international connections that touch their lives without extensive or complicated efforts to uncover hidden linkages. They also introduce students to the systemic or weblike nature of our global economic linkages. For example, Seymour's alarm clock is an obvious import (a product of the Sony Corporation). Hidden are the vast array of other people who participate in the economic system that brings the alarm clock to Seymour's neighborhood store (for example, the clock was shipped from its Brazilian assembly plant in a Greek-owned ship licensed in Liberia and staffed by a Portuguese crew!).

MAPPING GLOBAL TRADING SYSTEMS

The Seymour Someday readings suggest to students that the global economy is not simply a set of country-to-country exchanges but a complex web of activities and institutions—a system. Helping students perceive and comprehend that system can help them understand how economic decisions by people in one country can have a significant impact on those in other countries, even when there are no clear or concrete linkages. The realization that we are interdependent with other peoples in this way is a key objective in teaching global understanding.

One way to help students perceive the global trading system is to map the variety of raw materials and countries that are involved in producing many goods. For example:

- Have students select a common product—not necessarily an imported one—and list the materials that go into it. Some research may be needed to complete the list—for example, to identify alloys used in steel. Then have students identify key countries that export those materials and prepare a map showing those linkages.

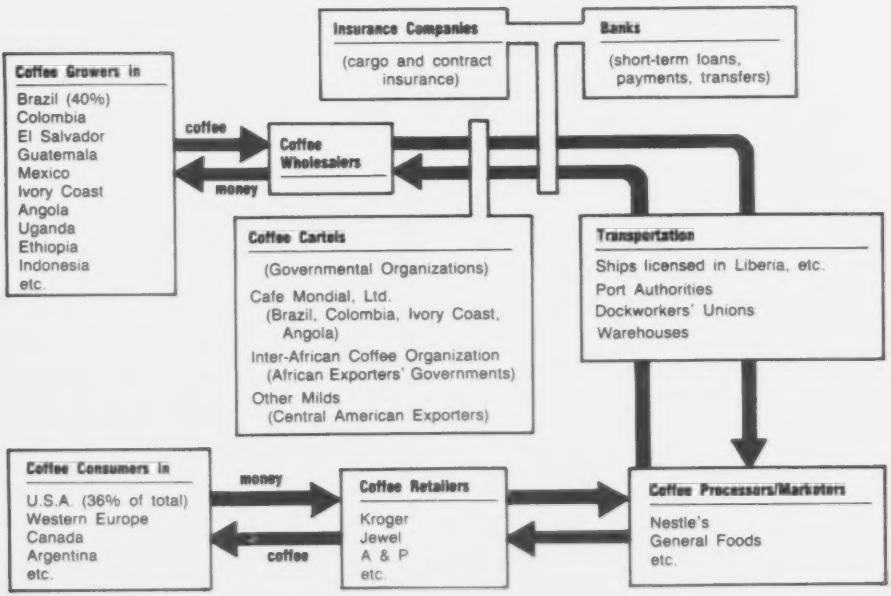
Imported cars from Japan provide an excellent opportunity for mapping this type of trading system. Modern automobiles contain an incredible variety of raw materials (iron, chromium, manganese, aluminum, copper, lead, nickel, zinc, rubber, plastics, and synthetic fibers). In the case of Japanese cars, virtually all the raw materials used are imported from other countries.[5]

Another approach to mapping global trading systems is to look at the map of institutions that are involved in trading particular commodities. The chart showing the global coffee trading system outlines the key actors in that network, including consumers and growers, retailers, processors. Also included are key organizations that affect the trade in coffee by providing trading services (insurance companies and banks) or by creating rules and levying taxes (the coffee cartels and their member governments).

Once students have a concrete image of a trading system, they can begin to explore the system's interdependence. The following are some suggestions for instruction:

- Have students, working in small groups, develop scenarios that indicate how actions and decisions by some actors in the coffee trading system affect other actors. For example, how might boycotts by dockworkers affect coffee growers,

THE GLOBAL COFFEE TRADE



retailers, and consumers? Make sure students identify a variety of scenarios, including those with positive as well as negative impacts on consumers.

Discuss the scenarios, showing how economic concepts can be used to predict the effect of particular actions. Also discuss how the evaluation of a particular action or decision may depend on one's perspective. While all actors have a stake in the system, not all are affected in the same ways by changes in the system.

- Pose a scenario or set of scenarios to students and have them identify (a) how different actors in the trading system are affected and (b) what those actors might do to minimize that impact if it is negative. For example, how might actors in the coffee system be affected by a crop-killing freeze in Brazil? How might consumers, processors, and retailers respond to high coffee prices? Use the discussion as a way to reinforce or introduce such economic concepts as substitution, supply and demand, or the elasticity of demand.

These discussions can be followed up by activities that indicate the diversity of global trading systems and the ways in which local economic actors are involved in these systems. The following are some teaching ideas:

- Using the chart of the Global Coffee Trade as a guide, have students choose a product of local interest and identify the global trading system for that product. Charts outlining the system could be more or less detailed, but encourage students to identify specific companies and organizations to the extent possible. Parents who work for companies involved in the system might be of considerable help in providing details (for example, through which ports the products are shipped, which international companies are involved).

- Have students clip newspaper stories about events or actions with economic implications. For each story students might identify how the event may affect various actors in an international trading system.

- Have students clip newspaper articles from the financial page that suggest how local corporations may be involved in various trading systems.

ANALYZING TRADE PATTERNS AND RELATIONSHIPS

As efforts to map global trading systems suggest, relationships of actors within economic systems can be a confusing blend of cooperation and conflict. All actors have an interest in the effective operation of the system. The system helps satisfy some need or want—whether for a morning cup of coffee or for income needed to purchase other goods. At the same time the interests of different actors are partly in conflict. Consumers want lower prices, producers want cheaper services, and governments want higher tax revenues. As a result, trading systems rarely operate in total harmony.

By analyzing different trading patterns and relationships, students can begin to see why economic relationships are rarely as clear-cut as strict economic logic might suggest. They can also begin to explore how a variety of values and demands often compete in real-world economic decisions. In the process of making and analyzing such decisions, students can develop their critical thinking skills and their ability to make decisions about economic issues.

LOOKING AT TRADE PATTERNS

Most Americans, especially those in midwestern farm communities, are quite aware of the importance of the world market for American farmers. In recent years, up to two-thirds of the American grain crop (wheat, corn, soybeans) has been sold on the international market. Actually, American grain exports represent only about 7 percent of the grain consumed in the world. Yet, American crops, along with those of Canadian, Australian, and Argentinian farmers, provide the grain-deficit regions of Europe, Asia, Africa, and Latin America with a critical resource. But where does American grain go and why?

In answering these questions, students can be introduced to both the economics and the politics of the global economy. The table "Where American Grain Goes" provides statistics on American grain transfers (sales and aid) for a recent typical year. (Only about 5 percent of total food shipments are part of aid programs.) Sales of wheat, soybeans, and feed grains are broken down by geographical destination and by the per capita income of consuming countries.

WHERE AMERICAN GRAIN GOES
(Values in U.S. $1,000)

	Value Exported		
	Feed Grains[1]	Wheat	Soybeans
Canada	$ 19,833	—	$ 67,187
Latin America	400,546	$ 819,198	185,746
Africa	143,294	506,188	24,855
Asia	1,657,277	1,479,267	1,367,817
Europe	2,951,784	831,936	2,951,074
Unknown[2]	311,720	239,814	152,370
Total Value	$5,484,454	$3,876,403	$4,749,049

By Per Capita Income of Country	Feed Grains[1]	Wheat	Soybeans
Countries with Per Capita Income over $2,000	$3,874,952	$1,230,969	$3,888,280
Countries with Per Capita Income Between $1,000 and $2,000	906,125	1,065,591	556,871
Countries with Per Capita Income Below $1,000	391,657	1,340,029	151,528

	Feed Grains[1]	Wheat	Soybeans
Average Price Per Metric Ton	$102	$178	$241

[1]Feed grains are used as feed for animals, not for direct human consumption. Wheat and soybean categories are exports for human consumption.

[2]Unknown destination because the grain was transshipped through Canada.

- Have students prepare charts or graphs that clearly show who buys the different types of American grain and who buys the most grain overall (in tonnage and value).
- Discuss with the class the reasons why different areas of the world are grain importers (for example, limits on land as a factor of production, high population or high income relative to food-producing ability). Also discuss how income affects

the types of food eaten and how that might affect incentives to American farmers.

- Have students in small groups suggest hypotheses about American grain sales abroad *before* seeing the table. Then, individually or in small groups have them use the data in the table to test those hypotheses, preparing graphs and charts as appropriate.

Having students deal with international trade statistics in these ways can be difficult because of the sheer size of the numbers involved. On the other hand, these numbers provide a real-life opportunity for students to make simple calculations using exponential numbers. Thus the exercise can have relevance for the mathematics as well as the social studies classroom.

MAKING POLICIES ABOUT TRADE

No economic system operates solely on the basis of pure economic principles. In an uncertain world many noneconomic values and needs compete with economic rationality for the hearts and minds of decision makers. It is precisely for this reason that students need to develop their ability to make judgments and decisions about global economic relationships.

One strategy for sensitizing students to the potential conflict among values in economic decisions, and the need to look at economic relationships from a variety of perspectives, is "The Common Market Exercise." In this decision-making simulation, teams of students represent the governments of Islandia and Continenta. The two nations have complementary comparative advantages in producing clothing on the one hand and food on the other. Economic efficiency would argue for encouraging a complete division of labor between the two nations. But as teams begin to make decisions about creating a common market for food and clothing, new uncertainties and values surface.

- Divide the class into an even number of teams, each with about three to four members. Half the teams will represent Islandia, half Continenta.

  Using the Fact Sheet, calculate and discuss how well each nation can meet its basic needs (shelter, clothing, food) in isolation. How can each benefit from trade? Discuss the comparative advantages of each nation, and the terms of trade that would allow each nation to satisfy its basic needs

optimally (with maximum economic efficiency).

Then hand out the appropriate Secret Briefing Memo to each nation-team. Let the teams come to some consensus about their negotiating positions. Then have pairs of teams representing Islandia and Continenta attempt to negotiate a mutually acceptable treaty. After 10 to 15 minutes, discuss the negotiations and the practical impossibility of maximizing the values of efficiency, security, and equity in this case.

The Common Market negotiations can be frustrating for students who expect neat solutions to the problems they confront. For that very reason, however, the exercise can effectively sensitize students to conflicting values in real-world situations. Discussions following the exercise can help students see the potential insecurity in any economic systems characterized by a division of labor (for example, consider the effects of trucking strikes). Students can also discuss how individual understanding of what is equitable or fair tends to change as conditions change.

CONCLUSION

This chapter has discussed a variety of specific activities that integrate economic education and global learning. The activities suggest some basic ways in which the two subjects can enrich each other.

For educators interested primarily in economics, attention to the global economy introduces a useful new perspective. Even simple economic linkages gain added significance as students see their social, cultural, and political aspects. Basic economic concepts such as the division of labor take on a new dimension as students see these familiar relationships in a new way and begin to probe otherwise hidden issues like security and equity. In this sense a global perspective can help economic educators highlight the human side of their discipline.

By the same token, the contribution of economic education to global learning is of fundamental importance. Our global economic ties constitute a critical part of our relationships with other peoples and nations. Although the global economy may not operate solely in response to the market's "invisible hand," market forces are basic to its operation. And students cannot fully appreciate their economic linkages or make reasonable judgments about global economic issues without understanding basic economic concepts as they apply to the world arena.

THE COMMON MARKET EXERCISE*

Fact Sheet

The Resources of Islandia and Continenta

Islandia

Islandia is a mountainous and crowded island nation. Its population of 12,000 includes a work force of 9,000.

Islandia has limited natural resources. Its soil and climate are suitable for growing cotton, but much of its hilly land can be used only for grazing. Trees and stones are abundant.

In part because of their environment, Islandians are an industrious and disciplined people. They have also mastered a new technology for making high-quality cloth and clothing. In a given year, the average worker on Islandia can produce:

a. enough food to meet the annual needs of four people, or
b. enough clothing to meet the annual needs of ten people, or
c. enough housing to meet the annual needs of two people.

Continenta

Continenta is a spacious continental nation, with fertile soil, a temperate climate, and adequate rainfall. Continenta's population of 18,000 includes a work force of 12,000.

The culture of Continenta places high value on owning and working on the land. While Continenta has a rich variety of raw materials, the simple technologies available have made limited use of them.

In a given year, the average worker of Continenta can produce:

a. enough food to meet the annual needs of ten people, or
b. enough clothing to meet the annual needs of three people, or
c. enough housing to meet the annual needs of two people.

*Adapted from an exercise in *Food in the Global Arena* by Raymond F. Hopkins, Robert L. Paarlberg, and Mitchel B. Wallerstein (New York: Holt, Rinehart and Winston, 1982).

THE COMMON MARKET EXERCISE

Secret Briefing Memos

Islandia (For Your Eyes Only)

The Supreme Council has met and raised important questions about the security of our food supplies should we become completely dependent on Continenta.

We do not question the good faith of the present government, but what if Continenta were struck by a drought? If its food harvest fell, what would they do? Would they cut their food exports and make us bear the burden of the lost harvest? Would they tighten their own belts and sell us what we need—but at higher prices?

We have decided to increase our food security by growing a reasonable percentage of our own food. You should decide how much food to produce. You must also get more favorable terms of trade for Continenta food. We will have less clothing to trade for the food we will need. But that is only fair. It takes more expertise and greater investment to produce clothing than food.

Continenta (For Your Eyes Only)

The Central Committee has met and raised some important questions about the equity of the trade agreement being negotiated with Islandia.

We have noted that the Islandians' efforts to develop new ways of making clothing are leading to new machines and new ideas about the physical world. (They call this "science.") While we are learning about some of these advances, we are lagging behind the Islandians. Over time, as the Islandians learn to apply this new knowledge to things besides making clothing, we may become no more than a vassal state.

The only way to avoid this condition is to maintain a reasonably sized clothing industry of our own. You should decide how much clothing we should make. You will also need to negotiate more favorable terms of trade with the Islandians. We will not have as much food to trade for the clothing we will still need to import. Since food is a more basic need than clothing, however, you should be in a strong bargaining position.

NOTES

[1] See the January 1984 issue of *Social Education* on "The World Economy," edited by Darrell R. Lewis and Bruce Dalgaard. Also see "Selected Resources for Teaching about Global Economics," available from Global Perspectives in Education, Inc., 218 E. 18th St., New York, NY 10003.

[2] A Community in the World resource guide that lists these efforts and provides information on contact people in various cities is available from the Citizenship Development Program, Mershon Center, 199 W. 10th Ave., Columbus, OH 43201.

[3] This information is available in a variety of books on ecopolitical issues and limits to growth. See, for example, Dennis Pirages, *Global Ecopolitics* (North Scituate, Mass: Duxbury Press, 1978), pp. 150, 154, and 169.

[4] The Seymour Someday readings are from the lesson "International Linkages Are All Around You" in *Making Decisions: Our Global Connection*, Columbus Council on World Affairs, 57 Jefferson Ave., Columbus, OH 43215. This set of 10 lessons has been reproduced on microfilm and is available through the Educational Resource Information Center (ERIC).

[5] "The World in a Chocolate Bar" is a similar effort to map a global trading system. This chart with pictures and activity ideas is available from Global Perspectives in Education, Inc., 218 E. 18th St., New York, NY 10003.

[6] The Common Market Exercise is adapted from an exercise originally published in *Food in the Global Arena* by Raymond F. Hopkins, Robert L. Paarlberg, and Mitchel B. Wallerstein (New York: Holt, Rinehart and Winston, 1982).

8. Teaching Economics Using the Local Community

by Mark C. Schug and Stephen Haessler

RATIONALE

Economic ideas, whether presented in social studies, home economics, industrial arts, or business education, are often taught as abstractions with little bearing on the everyday lives of young people. The nature of economics may be partly responsible for this situation. Even simple concepts, such as the laws of supply and demand, often involve phenomena that must be inferred from observation of human behavior rather than something that can be concretely observed through the senses. In addition, some higher-level concepts and principles are not always understood as certainties. As with many other social studies concepts, economic ideas are often referred to as tendencies rather than certainties of human behavior. While thoughtful authors of economics textbooks try to develop learning materials that are meaningful to young people, they are among the first to admit that students need the richness and depth of community-based experiences to help them better understand concepts and principles and their relationships, in order to form a basis for analyzing problems and making decisions.

The community is a vital resource for teaching economics for other important reasons. Many young children and adolescents feel a sense of alienation toward their local area. They spend large parts of their days in what they sometimes feel is an artificial school environment removed from the everyday activity of community life. They believe that they have little opportunity to participate in real activities. Developing a better understanding of the local economy can help them develop a sense of social efficacy that encourages participation in community life. In addition, community study helps build a stronger identity with the local area, and reduces feelings of cynicism and apathy so common among many adolescents.

Any community, regardless of its population, is a rich source of information on economic concepts. Rural communities, middle-sized cities, and large urban centers—all have meaningful econom-

ic processes that can be used as a basis for learning activities for young people. They offer information on many economic ideas and processes such as aspects of the production process, taxes, economic planning, and economic interdependence. They are also a valuable source of information about economic behavior that is vastly underused by the schools.

Finally, learning economics by means of the local community provides students with numerous opportunities to become better citizens. The essence of a community-based economics curriculum is the primacy of students. Indeed, students constitute the single most important resource of the local community, namely, its future. Through education, the schools consciously foster those attitudes and skills deemed most valuable to community interests. Through this process, students enter their community's social relationships with a charge and an invitation—to carry on the work of reproducing the life of the community; and to deliberate during their school years upon the kind of community they want, and to actively participate in bringing about their vision of the future.

MAKING A COMMUNITY SURVEY

There are many ways to learn economic ideas by focusing on the local community. Most of the approaches suggested here are not easily separated from each other; community economics provides a mosaic of teaching approaches. The exact design of the program remains firmly in the hands of local teachers, school administrators, and community resource people.

When educators think about using the local community as a source for study, they usually think about organizing field trips or arranging for guest speakers. The local economic community is a rich resource for such learning activities. A good starting point is a community survey to identify resources for guest speakers, field trips, student internships, summer internships for teachers, or other learning opportunities. Such a survey usually takes the form of a questionnaire distributed to all parts of the economic community including business, organized labor, and agriculture. Often a local Chamber of Commerce has assembled a speakers' bureau. This is a good beginning, but many of the speakers identified by the Chamber of Commerce may not necessarily be appropriate for young audiences. The schools usually need to do a survey that more directly meets the needs of students and teachers.

A caution to keep in mind in doing this survey is that suitable economic field trips are sometimes hard to find. Many factories, which would normally provide valuable opportunities for young people to learn about the production process, are off limits to minors because of the danger of injury. Special care should be taken to identify a variety of appropriate field trip sites in addition to factories—for example, stock brokerages, banks, insurance firms, labor unions, professional sports offices, and local government offices.

After collecting the survey data, the school district may wish to assemble the information into a community economics directory to distribute to teachers. At this point, several steps might be taken to help teachers contact the resources. These steps might include the following:

- Establish a pilot project involving a few teachers in one or two schools who are most interested in using community resources. These teachers can work with the speakers and take the field trips that have been suggested. They, in turn, can share their experiences with other local teachers, making practical suggestions about which community-based experiences seem to work best.
- Set up an in-service day to present teachers with the results of the survey and tips on how best to use these resources. The program also might include specific suggestions for learning activities to carry out before, during, and after the community experience.
- Obtain special funding from a local firm or community agency interested in economic education. These funds might be used to support the release of a teacher from regular school duties to coordinate contacts between teachers and community people. This is a difficult step to accomplish because funds are always scarce. However, it is important because many teachers do not have time during the school day to telephone community contacts and work out the details that contribute to a good learning experience.

Another caution to keep in mind is that all community resources identified in the survey may not be equally helpful to students. Obviously, some guest speakers are very effective with young people while others are not. Teachers who use community resources extensively find it useful to develop procedures to help guest speakers prepare their presentations. For example, they

might make the following suggestions:

- Use interesting visuals such as slides or artifacts that might be of interest to students.
- Prepare remarks in advance but remember to pause often to ask questions and encourage discussion.
- Do not become defensive if students point out negative aspects of local economic activity. Instead, explain your position carefully and with understanding.
- Avoid reading a prepared speech.

Similarly, teachers may need reminders about how to use guest speakers most effectively. They should prepare their classes by giving students background information on the topic for discussion and encouraging students to prepare questions for the speaker in advance. Teachers should also decide the most appropriate format for the speaker. For example, they might prepare participants for a press-conference-style interview with the speaker giving some brief introductory remarks followed by student questions. To help the speaker feel at ease, teachers should remain in the room during the presentation, have students wear name tags, and provide an escort for the speaker to and from the room. Finally, teachers should plan followup activities such as a debriefing class discussion to help students reflect on the speaker's ideas.

BUILDING A COMMUNITY-BASED ECONOMICS CURRICULUM

A second approach for community economic programs is to focus specific parts of the curriculum on the study of the local area as a microcosm of broader economic concepts and principles. A variety of school districts and individual teachers have developed community-based economics curricula that have worthwhile results for students. A description of such a curriculum follows.

A series of awareness projects might introduce young people to the importance of their own roles in the local economy. For example, large numbers of high school students are employed as part-time workers, but rarely do they reflect on their work experiences as opportunities for learning. Class activities might include oral reports, a student survey, or a discussion on student work experiences. The following questions can help focus student thinking:

- What type of job do you have?

- What are your wages, hours, and working conditions?
- What scheduling difficulties do you have between work and school?
- What trade-offs do you have to make between work and school?
- How does the job you have now make direct and indirect contributions to your long-range career goals?
- What goods and services are you involved in providing?
- How does your employer specialize to produce goods or services?
- What is your specialized role in the production process?
- What is the total annual revenue of your employer?
- What are the total wages paid by your employer?
- Who are the primary and secondary customers of your employer?
- Who are the main competitors of your employer?
- What do you see as the growth prospects of your employer?
- How has technological change or innovation influenced the production process of your employer?

The next step is to develop learning activities that focus on the economic activity of the local community. To do this, some curriculum projects have developed profiles of local economic activity. This type of project can take many forms. Whatever the form, however, most important is the identification of data about the local economy. Several resources exist. Class activities can also be designed to help students gather data. For example, one school district runs a "local economic issues forum." Once each week, students develop seminar discussion questions and share summaries and critiques of economic news from the local and national media. The merger of two area banks, the layoff of 39 hospital employees, and the increase of local property taxes are examples of student-selected topics that offered opportunities for teaching economic concepts. Students in these seminars began to ask such tough questions as—"What is the impact of bank mergers on competition in the local community?" "What are some opportunity costs if the hospital decides to lay off employees?" "Who pays the most and the least taxes in our community and why?"

In addition to class activities, the local Chamber of Commerce, the city or county planning agency, or the labor market informa-

tion office maintains current records on the fundamentals of the local economy. The local library, direct contact with members of the economic community, and local newspaper files are also very helpful resources. As a starting point, teachers could collect some of the following information:

- Population changes over time according to census data
- Types of available housing
- Median and mean household income
- Tax information, including property tax rates
- Type of local government organization
- Transportation systems such as railroads, bus systems, airlines, and expressways
- Labor force, including number of people employed and unemployed
- Major local employers, including number of employees, and types of businesses.

Data such as these can be used to answer a variety of questions on the operation of the local economy and can help young people learn basic economic concepts and their relationships to each other. The following sample questions can be used to analyze these data:

- What is the economic base of the local economy?
- In what ways is the local economy specialized in the production of goods and services?
- What are the strengths of the local economic base?
- What are the weaknesses or problems of the local economy?
- How does the economic system form an interdependent system locally, regionally, nationally, and internationally?
- What is the role of firms, government, and individuals in shaping local economic policy?
- How are local economic institutions changing?

Specific learning activities can be constructed to answer these types of questions. One approach is to present students with the information in a fairly raw form and let them use the data to answer appropriate questions. For example, give students a list of the community's major employers, including organizations from both private and public sectors (see Lesson 1 at the end of this chapter). Instruct students to classify the various economic organizations into meaningful categories—for example, manufacturers,

retailers, services, and wholesalers. Next, present students with information about changes in the number of employees working in the various parts of the local economy over time. A series of pie graphs would be helpful to illustrate this idea. Conclude the activity by asking a sequence of questions to help students form generalizations about the economic base of their community and how it might be changing. They might find, for example, that the local economy depends heavily on one activity, such as manufacturing, but it is gradually shifting toward employing more people in service businesses.

Another approach is to organize data into community case studies. These might focus on problems faced by local government bodies, individual firms, labor unions, or farms. Case materials using many different topics or issues can be developed. The following are some sample topics:

- The local school board is trying to decide whether to close a neighborhood school to save money. Parents in the neighborhood are very upset. What are the trade-offs the school board will make to the community if it decides to close the building?
- The state government is looking for a site for a toxic waste dump. The people in the area near the proposed site are very worried about the location of the dump. What are the advantages and disadvantages to the state and the local community of building the toxic waste dump?
- The federal government is proposing a higher tariff to protect a local manufacturer of more than 2,000 people from foreign competition. The manufacturer argues that foreign competitors are dumping their products on the U.S. market. Other industry observers believe that the manufacturer has been slow to recognize changes in the market and produces an outmoded product that few consumers want. What economic goals are accomplished if the decision is made to increase the tariff and what goals are accomplished if nothing is done? (Lesson 2 at the end of this chapter illustrates such a case study used to examine the Milwaukee community economy.)
- A meatpacking firm, which is an important local employer, claims that resources used in making its products cost more and more, that the plant is in serious need of renovation, and that foreign competition is getting stiffer. Management

has requested that the local union take a reduction in pay and benefits during the next round of negotiations. What are the costs and benefits to the union if it agrees to the series of give-backs?

An example of an actual teaching experience might help illustrate the value of case studies. One school district involved students in learning about the impact on the local economy of national political issues. A debate was organized between executive officers of an area defense contractor and two officials of the union representing the company employees. The company executives stressed the necessity of achieving national security through military preparedness. They also pointed to the material benefits their company's presence in the local community represented—employment, the multiplier and accelerator effects, and economic growth.

The union officials presented an opposing viewpoint. They raised concerns about employment levels in military versus nonmilitary industries, defense spending and sluggish economic growth, the purposes and uses of high technology, diminishing marginal utility and weapons systems, and the tradeoffs between military and nonmilitary spending. Because the debate involved local people, students were inspired to pursue their investigation of the issue. As spinoffs of the experience they wrote letters to members of Congress requesting information on peace economy conversion legislation, they researched the evidence presented by the debate participants, and they compiled an annotated list of organizations representing conflicting viewpoints on defense spending. By grappling with the issue of defense spending at the local level, students applied economic reasoning to help them make decisions about alternatives that had become real and concrete, not mere textbook asbtractions.

A final approach to building a community economics curriculum involves student research projects focused on individual firms. With so many students employed by area businesses, it is often possible to integrate work experiences into these projects. In this way, basic economic concepts such as marketing, pricing, employment, and competition can be applied to local enterprises. This approach can also be expanded to studying the entire industry of which the local firm is a part. For example, a student project focusing on a local retail clothing store could be broadened to a study of the U.S. apparel industry; a project on a local restaurant could be extended into an examination of the fast-food industry.

DIRECT COMMUNITY EXPERIENCES

A final step in building a community-based economics curriculum is to identify methods of putting students into direct and extended contact with the economic community. This can be done in a variety of ways. Some programs have experimented with finding economic internships for individual students. For example, some high schools offer academic credit for community service experiences. A supervised student internship in one or more parts of the local economic community can be considered an important part of a high school's community service program. Other teachers have made ongoing community experiences part of existing economics-related courses by requiring that students on their own time become involved in such varied activities as interviewing economic leaders, attending public discussions of economic issues, or researching local economic issues.

One school district is currently experimenting with high school students serving on the economic planning committee of the local Chamber of Commerce.This project is intended to put students in direct contact with community economic leaders and thus involve them in the economic decision-making process.

TIPS FOR GETTING STARTED

There are a number of steps that teachers who are interested in developing a community economics program should consider. The specific actions taken depend, of course, on circumstances in the particular school district and existing relationships between the school district and the economic community. The first step is to gain the support of school administrators for the concept of such a program. The building principal is a key individual who should be involved early in the planning process. The help of central office administrators is also important. The school superintendent, for example, often has frequent dealings with various members of the local economic community and might well have several suggestions on how best to proceed.

The second step is to analyze students' current understanding of basic economic ideas. For a large-scale curriculum project, for example, a systematic evaluation of students' economic knowledge is needed. The Joint Council on Economic Education is a good resource for obtaining several types of economic tests that have been carefully designed and normed with national samples (see Chapter 9). These tests are available for use at a variety of grade

levels. For teachers who envision a more modest program that involves students in their own classrooms, less formal means of testing, including open-ended questionnaires and class discussions, will be sufficient.

Regardless of the scale of the project, a community advisory committee can offer guidance. Such committees can usually provide many practical suggestions on how to run a community economics program. For example, committee members can suggest what organizations might welcome student interns and who in the community might be the best guest speakers for students of high school age. An important idea to keep in mind in setting up any advisory committee is to involve all segments of the local economic community—business, organized labor, and agriculture—as well as representatives from other interested groups such as educators, parents, students, and civic associations.

ADVANTAGES AND DISADVANTAGES

There are numerous advantages and disadvantages to consider in deciding whether to initiate a community economics program. The use of community resources usually requires teachers to spend more time preparing lessons and dealing with a number of uncertainties. For example, guest speakers may not show up in class as scheduled or may not be as effective as anticipated. Similarly, it is hard to know if the field trip to the local tannery that worked so well with last year's class will be as successful with this year's group. Another problem with community-based programs, especially those that involve curriculum development, is that they can be difficult to sustain. Teachers are sometimes prone to stay with the program for several years, become tired, and gradually make less and less use of community resources. In addition, materials for curriculum projects that focus on community issues need to be modified on a regular basis because of changes in economic issues from year to year.

Nonetheless, there are teachers who are deeply committed to community-based programs. It is very exciting to watch young people deal with community problems on a firsthand basis. Educators sometimes feel frustrated because they do not always see the immediate results of their work. Using community resources is a way for both teachers and students to experience the excitement and new learning that can take place when the curriculum focuses on ideas and information that are really meaningful to young people.

SAMPLE LESSONS

The two lessons that follow illustrate ideas suggested in this chapter for studying community economics. Although these lessons have been designed to study the economy of Milwaukee, they can be adapted for use in other communities. In the first lesson students examine the economic base of their community; the second lesson is a case study of an economic problem involving international trade.

LESSON 1

MILWAUKEE'S ECONOMIC BASE

OBJECTIVE: Using a list of major area employers, students form categories of local economic activity such as retail, manufacturing, and service. Next students identify which economic activities employ the most people and how these activities often depend upon one another.

MATERIALS: Handout: "Major Employers in Milwaukee"

TEACHING PROCEDURES

1. Tell students that today they are going to focus on how people in Milwaukee make a living.
2. Distribute the handout "Major Employers in Milwaukee." Explain that although 25 employers are listed, many of them perform similar activities.
3. After students have studied the list, lead a class discussion on how the employers might be most easily classified. Ask: "In what ways are some of these employers alike? How are they different? How could they be grouped together?" One possible classification is the following:

   M = Manufacturer
   R = Retailer
   W = Wholesaler
   S = Service

4. After students have classified the employers, ask them to draw some conclusions from their classifications.

   - Based on your classification of the employers, how would you describe the Milwaukee economy?
   - Considering this list of employers, how do you feel that people in Milwaukee depend on each other?
   - How do you think people outside Milwaukee depend on the Milwaukee economy?

STUDENT HANDOUT
MAJOR EMPLOYERS IN MILWAUKEE

The following is a list of employers of over 2,000 people provided by the Metropolitan Milwaukee Association of Commerce. Read over the list and decide how the employers could be grouped together. Use the space at the right to show the group in which you feel the employer belongs.

Name of Employer	Product	Type of Business
1. AC Spark Plug Division, GMC	Emissions Control Systems	_____
2. Allen Bradley Co.	Electric Motor Controls	_____
3. Allis-Chalmers Corp.	Agricultural Equipment	_____
4. Briggs and Stratton Corporation	Engines-Gasoline	_____
5. Eaton Corporation	Electronic Equipment and Supplies	_____
6. Falk Corporation	Machinery	_____
7. General Electric Company	Medical Equipment and Supplies	_____
8. Godfrey Company-Sentry Foods	Grocers	_____
9. Good Samaritan Medical Center	Hospitals	_____
10. Harnischfeger Corporation	Cranes,Construction Equipment and Supplies	_____
11. Johnson Controls	Control Systems and Regulators	_____
12. Kohls Food Stores	Grocers	_____
13. Ladish	Forgings	_____
14. Miller Brewing Co.	Beer	_____
15. Milwaukee Area Technical College	College/University	_____
16. OMC-Evinrude	Outboard Motors	_____
17. Pabst Brewing Co.	Beer	_____
18. J. C. Penney Co., Inc.	Department Store	_____
19. Rexnord, Inc.	Industrial Equipment	_____
20. Sears, Roebuck and Company	Department Store	_____
21. A. O. Smith	Automobile Parts and Supplies	_____
22. A. O. Smith Data Systems	Data Processing Systems and Services	_____
23. University of Wisconsin-Milwaukee	College/University	_____
24. Wisconsin Electric Power Company	Utility-Electric	_____
25. Wisconsin Telephone Co.	Utility-Telephone	_____

LESSON 2
HELP FOR HARLEY?

OBJECTIVE: After reading a case study, students analyze advantages and disadvantages of increasing tariffs to protect a domestic manufacturer.

MATERIALS: Handout: "Help for Harley?"

TEACHING PROCEDURES

1. Explain to students that today they are going to focus on how a local firm—Harley-Davidson Motor Company, Inc.—has recently received much international attention.
2. Introduce the case study by asking students:
   - What makes of motorcycles do you commonly see advertised or on the road?
   - Where are many of the motorcycles made?
   - Why do you suppose there are not more American-made motorcycles?
3. Distribute the case study "Help for Harley?" and allow the class time to read it carefully.
4. Lead a class discussion to help students analyze the problem.
   - What has been the health of the Harley-Davidson Motor Company in recent years?
   - Why do Harley-Davidson officials feel their firm has been declining?
   - Why do others in the motorcycle industry feel Harley-Davidson has been in trouble?
   - What plan has the Administration considered to solve the problem?
   - What are some reasons in favor of increasing the tariff?
   - If you were one of the President's advisers, what action would you suggest he take? Why?

STUDENT HANDOUT

HELP FOR HARLEY?

VOCABULARY: Monopoly Competition Tariff
Free Trade Efficiency

Harley-Davidson Motor Company, Inc., has been in operation since 1903. It once had a near monopoly on the large U.S. motorcycle market. Now, it has 14 percent of the market behind Honda, Yamaha, Kawasaki, and Suzuki. It is the lone survivor of 143 companies that once made motorcycles in the United States. It employs about 2,500 people, with about 1,200 in Wisconsin.

Harley-Davidson officials claim they are the victims of unfair foreign competition. They argue that the Japanese overproduced motorcycles and are selling them in the United States for less than the price charged in Europe or Japan. They feel that Japan is "dumping" motorcycles in the United States in an effort to capture the American market. The result of this foreign competition has been hard on Harley-Davidson. The firm has been losing money in recent years despite cuts and freezes in wages and reductions in the number of employes.

Some observers of the motorcycle industry do not agree with the position Harley-Davidson has taken. They insist that the company has suffered from inefficient production and a poor-quality, out-of-date product. They point out, for example, that Harley-Davidson charges about $8,600 for its top-of-the-line touring model, while the comparable Honda costs about $7,000.

Similarly, most economists argue that industries that are hurt by foreign competition are not as efficient as they might be. They argue that attempts to shelter industries from foreign competition offer little incentive for firms to hold down their costs, noting that increased costs are passed along to consumers in the form of higher prices.

In 1983, the President's international trade advisers became very concerned with the plight of Harley-Davidson and recommended an increase in the tariff on large Japanese motorcycles from 4.9 percent to 69.4 percent. This tariff was not viewed as a permanent policy; it would be gradually reduced over the next five years. The result of this action was expected to be a 12.5 percent rise in the prices of Japanese bikes by 1984.

The Japanese were expected to react strongly to the increase in the tariff on motorcycles by formally charging the United States with unfair trade practices. Harley-Davidson officials, on the other

hand, were very pleased with the idea and felt it would give them the time they needed to produce a better, more competitive motorcycle.

Some international business leaders agree with the position taken by Harley-Davidson. They argue that free trade is a nice theory that no longer works. They suggest that foreign governments give direct financial support to many of their industries in order to help them fight the international competition. The United States government does much the same thing indirectly.

Most economists disagree with the idea that free trade is a "dead idea." They argue that protecting industries from foreign competition is harmful to the long-term good of our economy and the world economy. They believe that free trade works to the benefit of all nations. High tariffs, they note, only help keep prices high and work as hidden taxes on consumers.

9. Economic Education Opportunities for Teachers

by Margaret A. Laughlin

There are numerous opportunities for teachers to learn about economics as a tool for everyday living for themselves and their students. A number of public and private organizations throughout the country have available, at little or no cost, a wide variety of opportunities and resources that provide educators with information on learning and teaching about economic concepts at various grade levels and in many subject areas. This chapter describes the educational activities and materials of several of these organizations. Teachers who wish more detailed information may write to any of the groups listed in the Appendix.*

JOINT COUNCIL ON ECONOMIC EDUCATION NETWORK

Teachers interested in learning more about economic education opportunities should begin by contacting the Joint Council on Economic Education (JCEE). An independent, nonprofit, nonpartisan organization, the JCEE was established in 1949 to improve economic education across the country and to provide a clearinghouse for economic education information. Its financial support comes from outside sources such as foundations, business, labor, agriculture, and interested individuals. Since its founding, the JCEE has focused on the education of teachers and the development of curriculum materials to improve economic understanding. It has developed and published a variety of teaching materials, sponsored professional development workshops for teachers, and provided numerous other educational services.

To promote these efforts, 50 State Councils and over 250 Centers for Economic Education are affiliated with the JCEE.

*The full names and latest available mailing addresses for the organizations mentioned in this chapter are listed in the Appendix.

Most often the State Councils and Centers operate from college and university campuses, providing a variety of services to state and local educators. Most Councils and/or Centers conduct either academic-year or summer economic education workshops of varying lengths that usually include options to earn academic credit. The workshops offer instruction in economics, demonstrate classroom applications of economic concepts, and provide resource materials for workshop or classroom use. Frequently, workshop directors invite guest speakers, organize field trips, and arrange previews of new instructional materials.

Individual State Councils and Centers may produce curriculum materials, publish newsletters, direct professional development programs for local school districts, or provide a resource list of guest speakers. For a listing of the State Council and nearest local Center for Economic Education, teachers should contact the JCEE. Next, they should contact the State Council and local Center directors to make their interest in economic education known and to secure assistance in developing economic education programs.

As mentioned earlier, the JCEE has an extensive publication program intended to provide teachers with the necessary resource materials for teaching economics. For example, the *Master Curriculum Guides in Economics* are designed to introduce economic concepts in the curriculum and to suggest guidelines for school districts to more readily integrate economics into existing courses of study. These *Guides* are divided into two parts. Part I provides a framework for teaching economics, including concise statements of basic concepts and generalizations. This document is a reference widely used in in-service courses for teachers and in curriculum development efforts. Part II consists of field-tested teaching strategies with separate publications for teaching economics at the primary level (grades 1–3); intermediate level (grades 4–6); junior high level (grades 7–9); and at the secondary level in U.S. history, world studies, and basic business and consumer education. Each teaching strategy guide includes lessons and activities to enhance student understanding of economics. In addition, twice each year the JCEE publishes *Checklist*, an annotated up-to-date listing of its publications. The two latest publications are *Teaching Strategies for High School Economics Courses* and *Consumer Economics*. Educators interested in receiving *Checklist* on a regular basis should contact the JCEE.

Other JCEE publications include the *Economics–Political Science*

series for high school students, which analyzes such important topics as inflation, growth policies of developing countries, crime and crime control, tax policies, government regulations, and health care. To measure student understanding of economic concepts, four tests for economic understanding are available for use with students in grades 2–3, 4–6, 7–9, and 11–12. Spanish-language versions of the latter two tests are also available.

Since students learn in several ways, the JCEE, in cooperation with the Canadian Foundation for Economic Education and the Agency for Instructional Television (AIT), has produced two video series designed to help students gain greater knowledge about economics and decision making in everyday life. *Trade-offs*, which is appropriate for use in grades 4–6, contains 15 independent 20-minute programs that help students learn to make sound economic decisions using a decision-making grid. *Give and Take*, designed for students in grades 8–10, is intended for use in consumer education, economics, business education, home economics, and other social studies courses. It dramatizes problem-solving situations that show how students use economic concepts on a daily basis. The programs in both series stand alone and may be used in any sequence. Some teachers may find selected programs appropriate for use at other grade levels.

In many areas of the country these programs are televised during the schoolday and, under certain circumstances, they may be recorded off the air. Before recording the programs, however, it is advisable to check with the State Council or Center director, or with the state educational television agency, to avoid any copyright violations.

The latest series of video programs developed by the JCEE, the AIT, and the Internal Revenue Service is *Tax Whys: Understanding Taxes*. These six programs for high school students are designed to show what happens to tax dollars, how taxes influence behavior, inflation, and the rate of unemployment. Many Council and Center directors, in cooperation with local educational television leaders, provide staff development workshops to help prepare teachers to use the series effectively in their classes. Related student learning activities and teacher guides for all three video series are available.

The annual awards program sponsored by the JCEE and supported by the International Paper Company Foundation is another effort that promotes the teaching of economics. This program is intended to stimulate improvement in economics

teaching practices, to provide recognition for outstanding teaching practices, and to encourage a replication and an exchange of successful teaching ideas and practices. Teachers, supervisors, administrators, counselors, and librarians at all levels are eligible to submit entries describing successful efforts to teach economics. First- through fourth-place entries in each of four categories receive cash awards of different amounts. Descriptions of the award-winning projects are published by the JCEE in *Economic Education Experiences of Enterprising Teachers*. This annual publication is useful to trigger new ideas about teaching economics at various grade levels. In addition, several State Councils and Centers sponsor their own awards programs. For specific details, contact the State Council or Center director.

Another JCEE effort to improve the teaching of economics is a curriculum development project, organized in 1964, called Developmental Economic Education Program (DEEP). This program currently enrolls over 400 individual schools or school districts and involves over 8,000,000 students, or approximately 20 percent of the nation's students. By the year 1990 the JCEE hopes to increase that number to 70 percent. Schools associated with the DEEP project receive a wide variety of JCEE materials and publications, consultant assistance, and other services to help students learn about economics.

With more extensive use of microcomputers in the classroom, the JCEE is providing software programs in economics. The Microcomputer High School Economics Project with eight modules is designed for in-class use and to supplement existing economics, business education, and social studies materials. It also includes professional development opportunities. In addition, a K-12 Microcomputer Sampler of five programs is currently available. Each unit contains a diskette and related print materials for teacher and/or student use. These new programs will help meet the high demand for these materials in the schools and will also introduce students (and teachers) to the use of the microcomputer. Several State Councils and Centers are already offering programs for teachers using the Microcomputer Sampler.

STATE AGENCIES

As more states mandate the study of economics, it is an excellent idea for teachers to contact the social studies supervisor in their state education agency to find out about new state

requirements or education opportunities in this area for teachers. In most instances the social studies supervisor will be able to respond to questions and offer specific suggestions. For example, some states have a number of publications such as frameworks, curriculum guides, goal descriptors, or program improvement guides that are helpful in developing course-specific economic content or in adapting state economic guidelines and resources to meet local district needs.

SPONSORED PROGRAMS AND MATERIALS

Many other organizations have established programs and developed materials for teaching economics and related economic concepts. In several cities local chambers of commerce have active economic education committees that work to establish linkages between business and education. Frequently the local chamber has a speakers' bureau and persons willing to work with educators in a variety of ways. In addition, local chambers often provide funds for full or partial scholarships for teachers attending JCEE programs or other such economic education programs in the area.

Large corporations such as Sears Roebuck, Procter and Gamble, and McDonald's, and banks, insurance companies, utility companies, and oil producers have developed a wide range of educational programs for teachers, as well as materials for classroom use. Many of these materials are of high quality and their use seems to be spreading with limited school budgets and an increasing interest in economics. Teachers, however, should be very cautious in selecting sponsored materials for classroom use. Sometimes these materials do not present a balanced view of a topic and may convey misleading economic information. Before deciding to use such materials, educators should ask the following questions:

1. Does the material provide a clear focus on economic concepts and generalizations?
2. Is the material accurate and does it allow for alternative interpretations?
3. Is the material related to the goals and objectives of the local curriculum?
4. What critical thinking and decision-making skills will students learn by using this material?
5. Do I, the teacher, have sufficient background to make the best use of this material in my class?

Two recently developed student-oriented programs that provide opportunities for teachers are Junior Achievement (JA) and Business World. In one JA program students meet outside the schoolday to learn about the economic system by forming companies that elect officers, sell stock, buy raw materials, and produce a product or service. In a second JA program a business executive works with a classroom teacher one day a week for a quarter or a semester. A third JA program, Applied Economics, an 18-week high school course that relates economics to the operation of a business, is being field-tested. It involves organizing a company and using computer simulations and games to make economic decisions. These programs have implications for professional development. For example, familiarization seminars for teachers using the JA programs are now underway.

The second major student-oriented program, Business World, operates in several states. It is a one-week summer live-in program for high school juniors and seniors. Working with several business leaders acting as consultants, students organize hypothetical companies and seek to learn how business operates. Throughout the week several resource persons address participants, covering a wide range of business-related topics. Teachers whose students attend the Business World experience often receive scholarships and attend parallel workshops or lectures. Usually a variety of resource materials are also available to them.

PROFESSIONAL ORGANIZATIONS

Four national professional organizations provide opportunities for educators to learn about economics: the National Council for the Social Studies (NCSS), the American Home Economics Association (AHEA), the National Business Education Association (NBEA) and the nongovernance affiliate of the NEA, the Home Economics Education Association (HEEA). The annual meetings of these groups frequently feature economics-related sections or workshops with suggested classroom applications. Each organization has a publications program, including journals, newsletters, and monographs, with information about economics or economic-related topics. For example, themes of recent issues of *Social Education* (NCSS) have been American labor, the American economy, world hunger, and energy, all with economic applications and implications. A recent AHEA publication focused on family economics and management, and several issues of the *Journal of Business Education* (NBEA) included articles related to the teaching of economics in business education courses.

Most states have statewide organizations in these disciplines and in some instances local or regional councils or associations. State and local associations usually hold statewide or regional meetings that may include sessions related to economics. Other professional associations may also sponsor economic-oriented sessions.

GRADUATE STUDY INTERNSHIPS AND WORKSHOPS

Teachers are frequently interested in pursuing studies in economics and economic education and obtaining advanced college degrees. Purdue University, the University of Delaware, and Ohio University offer excellent graduate degree programs in economic education. Teachers can also arrange with individual faculty members in education or economics at many other universities and colleges to complete a variety of appropriate courses in economics or economic education.

In addition to these sources for professional development, several other opportunities are available. For example, business and industry are often willing to provide internship opportunities for teachers to encourage the development of a business/industry/education partnership. Teachers interested in international travel may contact the local office of a multinational corporation and arrange to visit a company office abroad. Of course, these contacts and plans should be made well in advance of the projected travel dates.

Throughout the year public and private organizations and agencies may offer workshops, seminars, and symposia for educators, often with free economic materials for participants. These materials along with other personal and professional reading on economic issues or topics are additional ways to enhance professional development. Other national professional journals—such as the *Journal of Economic Education*, the *Journal of Business Education*, and *Social Studies* (published by Heldref Publishers)—also contain articles on economic education. Subscription information may be obtained by contacting the publisher directly (see Appendix).

SPECIALIZED ORGANIZATIONS

Several privately funded organizations provide resource materials and/or opportunities for professional development related to economic education. Each of these programs is directed to a particular group of economic educators.

The National Center of Economic Education for Children is committed to bringing the study of economics to elementary school students. It fosters a pragmatic view of economics, stressing the economic way of thinking in order to make informed decisions as citizens and consumers. *The Elementary Economist,* published several times a year by the National Center, allows teachers at several grade levels (preschool-grade 6) to "talk" with one another about practical economic education activities. Each issue includes background information for the teacher on a theme focus and field-tested, grade-level learning activities to help students learn important economic concepts. Elementary teachers wishing to receive a subscription to *The Elementary Economist* should send their name, mailing address, name of their school and school system (printed or typed only) to the National Center (see Appendix). In addition, the National Center has prepared several separate lesson plans, *Children in the Marketplace,* for students in grades 3 and 4; and a community-based economics unit, *Exploring the Community Marketplace,* designed for use in typical third and fourth grade social studies, language arts, and mathematics programs. Lesson plans for use at other grade levels and community-based economics units are currently being developed.

The California-based Foundation for Teaching Economics focuses on economic education opportunities for students at the middle school/junior high level. The Foundation seeks out businesses willing to supply educational materials and resources to assist school districts desiring to improve their teaching of economics. In addition, it develops materials that enable students to learn economics in a variety of exciting ways. Recently, the Foundation completed a filmstrip series on the production process and it is working on a new film, *Famous Amos,* which will help students learn about important economic concepts involved in starting a business. Foundation funds are also available for various professional development programs.

Another organization offering professional development activities for K-12 teachers is the publicly supported Academy for Economic Education. This group offers a three-week graduate level course focusing on new concepts in teaching economics. The course is available on college and university campuses in various locations around the country. One of the basic purposes of the course is to help educators better understand the functions of the marketplace. The Academy has also published a baseball game to help students learn several important economic concepts.

Finally, the Pacific Academy for Advanced Studies has produced the free enterprise Market Street film series designed for senior high school students.

Two other important sources of information for economic educators are the Social Science Education Consortium, Inc., and the Social Studies School Service. The Consortium has a variety of publications and products such as bibliography/reference sheets of resources for teaching economics, a newsletter, and digests of important information affecting social studies and economic educators. Duplicate copies of computer searches on several topics related to teaching economics may also be purchased at a reasonable cost. The Social Studies School Service publishes catalogs of commercially available teaching aids including filmstrips, transparency/duplicating books, media kits, games and simulations, texts, puzzles, cassettes, and posters. Special catalogs are available for consumer education and economics and for other specialized areas of social studies, home economics, and business education.

Clearly, many varied resources and professional development opportunities are available for teachers who wish to learn more about economics and to integrate economic content into new or existing courses. The growing national interest in economics, combined with the recognition of the importance of economic knowledge in making personal or societal decisions, makes it incumbent upon educators to present accurate economic information to students who are already making important economic decisions.

Appendix

The following is a list of organizations that provide a variety of resources, publications, and opportunities for interested economic educators.

Academy for Economic Education
1000 Virginia Center Parkway
Richmond, VA 23295

Agency for Instructional Television
Box A
Bloomington, IN 47402

American Bankers Association
1120 Connecticut Avenue, NW
Washington, DC 20036

American Home Economics Association
2010 Massachusetts Avenue, NW
Washington, DC 20036-1028

American Federation of Labor/Congress of Industrial Organizations (AFL/CIO)
815 Sixteenth Street, NW
Washington, DC 20006

Business World
Please contact your local Chamber of Commerce for specific details in your area.

Canadian Foundation for Economic Education
252 Bloor Street West
Toronto, Ontario M5S 1V5

FEDERAL RESERVE BANK

Main Office	*Zip Code*
Atlanta	30301
Boston	02106
Chicago	60690
Cleveland	44101
Dallas	75222
Kansas City (MO)	61498
Minneapolis	55480
New York	10045
Philadelphia	19105
Richmond	23219
San Francisco	94120
St. Louis	63166

Foundation for Teaching Economics
550 Kearny Street, Suite 100
San Francisco, CA 94108

Heldref Publications
4000 Albemarle Street, NW
Washington, DC 20016

Home Economics Education Association
1201 16th Street, NW — Room 232
Washington, DC 20036

Joint Council on Economic Education
2 Park Avenue
New York, NY 10016

Junior Achievement, Inc
550 Summer
Stamford, CT 06901

McDonald's Corporation
2111 Enco Drive
Oak Brook, IL 60521

National Business Education Association
1914 Association Drive
Reston, VA 22091

National Center of Economic Education for Children
Lesley College
35 Mellen Street
Cambridge, MA 02138

National Council for the Social Studies
3501 Newark Street, NW
Washington, DC 20016

Ohio University
College of Education
119B McCracken Hall
Athens, OH 45701

Pacific Academy for Advanced Studies
1100 Glendon Avenue, Suite 1625
Los Angeles, CA 90024

The Procter & Gamble Company
P.O. Box 599
Cincinnati, OH 45201

Purdue University
Department of Economics
Krannert Graduate School of Management
West Lafayette, IN 47907

Sears, Roebuck and Company
Consumer Information Services
D/703
Sears Tower
Chicago, IL 60684

Social Science Education Consortium, Inc.
855 Broadway
Boulder, CO 80302

Social Studies School Service
10000 Culver Boulevard
Department 15 - P.O. Box 802
Culver City, CA 90232-0802

U.S. Chamber of Commerce
3400 West 66th Street, Suite 300
Minneapolis, MN 55435

U.S. Department of Labor
Bureau of Labor Statistics

Regional Office	*Zip Code*
Boston	02203
New York	10036
Philadelphia	19101
Atlanta	30367
Chicago	60604
Dallas	75202
Kansas City (MO)	64106
San Francisco	94102

U.S. Government Printing Office (GPO)
Washington, DC 20402

University of Delaware
Center for Economic Education
110 Purnell Hall
Newark, DE 19711

The Contributors

Beverly Jeanne Armento is Associate Professor of Social Studies Education and Director of the Center for Business and Economic Education at Georgia State University, Atlanta. Currently (1984-85), she is President of the National Association of Economic Educators.

Ronald A. Banaszak is Vice President, Educational Programs, for the Foundation for Teaching Economics. Previously Dr. Banaszak was a junior and senior high school teacher in Chicago, and Assistant Professor at the University of the Pacific.

Judith Brenneke is Co-Director of the Cleveland Center for Economic Education at John Carroll University. Dr. Brenneke taught business education and consumer economics for five years at the high school and junior high school levels.

Stephen Haessler teaches economics and history in the Waukesha Public School district in Wisconsin. He is currently working on locally developed, multidisciplinary curriculum projects that weave together economics, local history, and philosophy for use in local schools.

Margaret A. Laughlin is Associate Professor of Education and Program Director for the Center for Economic Education at the University of Wisconsin-Green Bay. In 1980 she was a participant in the joint Council on Economic Education Consumer Economic Workshop in St. Louis.

Mark C. Schug is Associate Professor of Education at the University of Wisconsin-Milwaukee. He taught social studies for eight years in two public school districts and has served as the Associate Director for the University of Minnesota Center for Economic Education. He has received a national award for research in social studies education, and currently teaches courses in social studies methods and economic education.

Leon Schur is Professor of Economics and Director of the Center for Economic Education, University of Wisconsin-Milwaukee. His current research interest is the impact of introductory college courses in economics on economic attitudes and values.

John C. Soper is Co-Director of the Cleveland Center for Economic Education at John Carroll University. He has extensive experience in economic education and has been nationally recognized by the International Paper Company Foundation Awards Program for his skills in teaching economics.

William Walstad is with the University of Nebraska-Lincoln, where he is Associate Professor of Economics, Director of the Center for Economic Education, and Executive Director of the Nebraska Council on Economic Education. He has received three national awards for teaching excellence.

Michael Watts is Director of the Center for Economic Education and Assistant Professor of Economics in the Krannert Graduate School of Management at Purdue University. Over the past several years, he has directed a statewide assessment in economic education, which involved testing a stratified random sample of over 5,000 students and 200 teachers from key elementary and secondary grade levels.

Robert B. Woyach is a political scientist and Associate Director of the Citizenship Development and Global Perspectives Program of The Ohio State University's Mershon Center. Dr. Woyach has conducted research on the international relations of cities and on organizational factors affecting participation in local world affairs organizations.

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